

E THE ARIZONA CORPORATION COMMISSION ED

CARL J. KUNASEK 2 **CHAIRMAN** 1999 SEP 24 A 11: 35 3 JIM IRVIN **COMMISSIONER** AZ CORP COMMISSION 4 WILLIAM A. MUNDELL DOCUMENT CONTROL 5 COMMISSIONER 6 DOCKET NO. W-01656A-98-0577 IN THE MATTER OF THE JOINT 7 APPLICATION OF SUN CITY WATER SW-02334A-98-0577 COMPANY AND SUN CITY WEST 8 UTILITIES COMPANY FOR APPROVAL OF CENTRAL ARIZONA PROJECT WATER NOTICE OF FILING 9 **REBUTTAL TESTIMONY** UTILITIZATION PLAN AND FOR AN 10 ACCOUNTING ORDER AUTHORIZING A GROUNDWATER SAVINGS FEE AND 11 RECOVER OF DEFERRED CENTRAL 12 ARIZONA PROJECT EXPENSES. 13 Citizens Utilities Company hereby provides Notice of Filing Rebuttal Testimony for Carl W. Dabelstein, Ray L. Jones, Terri Sue C. Rossi, and Blain 14 15 Akine in the above-referenced docket. 16 RESPECTFULLY SUBMITTED this September 24, 1999. 17 18 19 man a. marla 20 Craig A. Marks 21 Associate General Counsel 22 Citizens Utilities Company 2901 N. Central Avenue, Suite 1660 23 Phoenix, Arizona 85012 24 Original and ten copies filed this 25 Arizona Corporation Commission September 24, 1999, with: DOCKETED 26 **Docket Control** 27 SEP 2 4 1999 Arizona Corporation Commission 28 1200 West Washington DOCKETED by Phoenix, Arizona 85007 29

-1 -

1	Copies of the foregoing mailed/delivered this September 24, 1999, to:
2	Jerry Rudibaugh
3	Arizona Corporation Commission
4	1200 West Washington Phoenix, Arizona 85007
5	,
6	Paul Bullis Arizona Corporation Commission
7	1200 West Washington
8	Phoenix, Arizona 85007
9	Deborah R. Scott
10	Arizona Corporation Commission 1200 West Washington
11	Phoenix, Arizona 85007
12	Scott Wakefield
13	RUCO 2828 North Central Avenue
14	Suite 1200
15	Phoenix, Arizona 85004
16	Michael A. Curtis
17	William P. Sullivan MARTINEZ & CURTIS
18	2712 N. 7 th Street
19	Phoenix, Arizona 85006
20	Walter W. Meek
21	AUIA 2100 North Central Avenue
22	Suite 210 Phoenix, Arizona 85004
23	,
24	William G. Beyer Beyer, McMahon & LaRue
25	10448 W. Coggins, Ste. C
26	Sun City, Arizona 85351
27	, ,
28	By: Joan Luchlewia
29	Jøann Zychlewicz

INTRODUCTION

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

- Q. Please state your name and address.
- A. My name is Carl W. Dabelstein. My business address is 2901 North Central Avenue, Suite 1660, Phoenix, Arizona, 85012.
- Q. By whom are you employed and in what capacity?
- A. I am employed by Citizens Utilities Company ("Citizens") as Vice President-Regulatory Affairs for its Public Service Sector, the portion of Citizens that provides electric, gas, water or wastewater utility service through operating divisions and subsidiaries in ten states, including Arizona.
- Q. Please state your professional qualifications.
- A. A description of my education and professional qualifications is attached as Appendix A.

PURPOSE OF TESTIMONY

- Q. What is the purpose of your testimony?
- A. The purpose of my testimony is to adopt the testimony of Mr. Charles Loy previously submitted in this proceeding, to recompute the proposed rates based on updated cost and customer data, and to respond to certain portions of the testimonies filed by other parties to this proceeding.
- Q. Why are you adopting Mr. Loy's testimony?
- A. Mr. Loy is no longer with Citizens.
- Q. Why is it necessary to revise any of the schedules filed by Mr. Loy?
- A. In his direct testimony, Mr. Loy provided cost and customer data used to develop the method and rates he proposed for recovering the deferred and

 on-going costs associated with the Central Arizona Project ("CAP") incurred by Sun City Water Company ("Sun City") and Sun City West Utilities Company ("Sun City West"). This was characterized as the Groundwater Savings Project Fee.

Citizens filed this application on October 1, 1998. Nearly a year has passed since that time. There have been additional CAP payments made that were not reflected in the rates developed by Mr. Loy that were intended to recover deferred costs. Moreover, more current customer consumption information is now available. These have been reflected in revised rates for Sun City and Sun City West that I am sponsoring in my testimony.

RECOVERY OF DEFERRED CAP COSTS

- Q. Please explain Schedule CWD-1.
- A. Schedule CWD-1 summarizes the amounts paid to the CAP during the period 1993 through 1999 that were intended to cover Sun City and Sun City West's allocated portion of the CAP's capital costs. As indicated previously in the testimonies of Mr. Loy and Ms. Rossi, the amounts initially were paid by Sun City in connection with its 15,835 acre-feet allocation of CAP water. Portions of these allocations (9,654 and 2,372 acre-feet, respectively) were assigned in 1998 to Citizens' Agua Fria Division and to Sun City West. Schedule CWD-1 reflects these redistributions.

In Decision No. 58750, issued in August 1994, the Arizona Corporation Commission granted the requisite accounting authority for such amounts to be deferred for future regulatory consideration. Schedule CWD-1 summarizes the CAP payments that have been deferred between October 1994 and May 1999. Payments made before October 1994 were not

covered by the deferral accounting order, and have accordingly been charged off to expense. As indicated on CWD-1, the accumulated deferred amounts for which recovery is now being sought are \$861,354 and \$494,866, for Sun City and Sun City West, respectively.

5 6

Q. How did you compute rates to recover deferred CAP payments?

8

7

Α.

Loy's Schedules CEL-1 and CEL-2), recovery of deferred CAP charges is being sought over a forty-two month period on a levelized basis. For

9 10

residential customers, the proposed method of recovery is through a flat

As presented on Schedules CWD-2 and CWD-3 (updated versions of Mr.

11 12 monthly rate per household. Commercial customers will be billed on a monthly usage (per 1,000 gallons) basis.

13

14

15

16

17

18

Schedules CWD-2A through CWD-2D present computations of the monthly revenue requirements for the deferred amounts reflecting the existing Federal and state income tax rates and the current authorized rate of return (8.73%) for Sun City and Sun City West. The deferred amounts for each operation were allocated to customer classes on the basis of sales volumes forecasted for the year 2000. These allocations appear on

19 20

Schedule CWD-3.

21

To determine the required levelized monthly amount, the present value of

the forty-two monthly revenue requirements was computed using the

23

current authorized rate of return as the discount rate. Then, a monthly

25

also using the current rate of return as the rate of interest. Once the

27

levelized monthly revenue requirements were determined, they were used to develop the applicable customer rates on Schedule CWD-3. For rate

amortization rate for that present value was computed as a simple annuity,

29

design purposes, the billing determinants used were the average number of residential customers (households) and average monthly water consumption (1,000 gallons) by commercial customers projected for the year 2000. As indicated in the testimony of Mr. Loy at the end of the 42-month recovery period an accounting will be performed, with any recoveries in excess of the computed total revenue requirements to be refunded to customers. Citizens will absorb any under-recoveries.

RECOVERY OF ON-GOING CAP COSTS

- Q. How did you calculate to recover on-going CAP payments?
- A. The on-going CAP costs include both the annual capital costs and the costs of delivery. They are summarized annually for the period 2000 2004 on Schedule CWD-4, which updates Schedule CEL-3 sponsored by Mr. Loy. The amounts for which recovery is sought each year were then reduced by the anticipated receipts associated with deliveries to the Maricopa Water District Groundwater Savings Project.

As with the proposed recovery of deferred CAP costs, the on-going costs will be recovered from residential customers through a flat monthly fee per household, and from commercial customers based on usage. During the first year, recovery would be based on rates reflecting the CAP holding and delivery charges approved by the CAP Board and forecasted numbers of households and commercial usage volumes. In subsequent years a true-up to actual would be part of the annual rate determination process. This process is illustrated on Mr. Loy's Schedule CEL-3.

PROPOSED RATES 1 Please summarize the rates that Sun City and Sun City West are requesting 2 Q. 3 to recover CAP costs, and the related bill impacts. 4 The proposed rates and related billing impacts are as follows: Α. 5 Monthly Rates to Recover Deferred CAP Costs: 6 Sun City Water 7 Residential, per Household \$0.5502 8 Commercial, Public Authority, 9 and Irrigation per 1,000 gallons \$0.0542 10 **Sun City West** 11 Residential per Household \$0.5970 12 Commercial per 1,000 gallons \$0.0709 13 Monthly Rates to Recover Annual CAP On-going Costs: 14 **Sun City Water** 15 16 Residential, per Household \$0.8016 Commercial, Public Authority, 17 18 and Irrigation per 1,000 gallons \$0.0790 19 **Sun City West** 20 Residential, per Household \$0.8666 21 Commercial per 1,000 gallons \$0.1029 22 23 Total Monthly Groundwater Savings Fee: 24 **Sun City Water** 25 Residential, per Household \$1.35 26 Commercial, Public Authority 27 and Irrigation (est. 63,000 gallons) \$8.39 28

1

2

3

Sun City West

Residential, per Household

\$1.46

Commercial (est. 63,000 gallons)

\$10.95

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

REBUTTAL TESTIMONY

- Q. Do any of the other parties to this proceeding challenge Citizens' proposed methodology to recover its CAP costs?
- Yes, several of the parties filed testimony in which they dispute the manner Α. by which Sun City and Sun City West would recover their deferred and ongoing CAP costs. The Residential Utility Consumer Office ("RUCO") witness (Ms. Cortez) opines that customers whose usage exceeds GPCD limits should pay the incremental cost of CAP water, and recommends that CAP costs be recovered in the form of a surcharge to customers exceeding certain monthly consumption levels. The Sun City Taxpayers Association ("SCTA") witness (Ms.Charlesworth) recommends that, if they are deemded recoverable, CAP costs should be collected primarily from customers entering the system, with any charge to existing customers based on water used. The Arizona Corporation Commission Staff witness (Mr. Fernandez) testifies that he agrees with the Company's proposed rate design methodology, but believes the recovery should be over a period of five years because the deferred charges accumulated over a period of five years.

23

24

25

26

27

28

22

- Q. Do you agree with such assertions?
- A. There are conceptual responses that I could and would typically make, such as the fact that both Sun City and Sun City West already have increasing block rates that tend to create an economic incentive for customers to conserve, and that there is no historical linkage or precedent between the

time period during which capital costs are accumulated and their prescribed recovery period. However, I believe that the most important justification for Citizens' proposed rate design is that it was desired by the members of the CAP Task Force, whose final report is the underlying basis for our cost recovery proposal. The Report is clear that CAP costs should be recovered by a flat monthly charge per household instead of a consumption-based billing approach. This is clearly shown on page 14 of the Report:

...the Task Force was concerned about how the costs would ultimately be distributed across the customer base. The Task Force was concerned that the costs for using CAP water should be assessed on a per household basis and not on consumption. CAP water should be considered as the first water supply delivered to customers, roughly the first 3,500 gallons, instead of making CAP water a portion of every gallon delivered. If the CAP water is assessed based on consumption, then the large water users will unfairly subsidize small water users even though on a per household basis the demand is comparable.

The Task Force Report reiterates this preference again on page 32:

Regarding the issue of distributing the costs across the customer base, the Task Force recommended that commercial customers be billed on consumption and that residential customers be billed on a per household basis. By billing residential customers on a per household basis, the individual condominium customer will pay the same amount for CAP water as an individual single family residential customer.

- Q. Does the Task Force Report identify a preferred recovery period?
- A. The Task Force expected that the recovery period would coincide with the construction period for the new golf course pipeline, estimated to be 42 months. The Report states at page v of the Executive Summary:

1 2 3 This cost would be incurred from January of 1999 until the groundwater savings project would be constructed in 2002. At that time, the deferral would discontinue and the costs associated with the ultimate solution would begin.

Despite the passage of time since the issuance of the Task Force Report and Citizens' application in this Docket, the recommended cost recovery period and estimated construction period remain unchanged. Our proposed rates have been designed accordingly.

8 9

Why should the Commission respect the Task Force's conclusions? Q.

10 11 12 Α. The Task Force reached these conclusions after the lengthy public process described in the Report. Both the flat monthly fee per household and the 42-month recovery period reflect the wishes of the Task Force.

13

14

15

Do any of the other parties to this proceeding recommend denial of any of Q. the costs for which recovery is being sought?

16 17

18

19

Yes, both the RUCO and Staff witnesses recommend that prospective carrying charges (rates of return on the deferred CAP costs) be excluded from recovery. In addition, the RUCO witness recommends exclusion of certain late payment charges as well. SCTA witness, Ms. Charlesworth, challenges the full recovery of deferred CAP costs and any recovery of

20 21

- 22
- 23 Q. Do you agree with such recommendations?

accrued carrying charges.

25 26 27

24

I do agree that late payment penalties should not recoverable, and have Α. excluded them from my cost analysis. I strongly disagree with the recommendations that cost recovery be denied or that prospective carrying charges be excluded from amounts chargeable to customers.

28

- 1 2
- 3
- 4 5
- 6
- 7
- 8
- 9
- 10
- 11 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 2425
- 26
- 27
- 28
- 29

- Q. Why should deferred CAP costs, as well as capital costs and delivery charges that will commence once the CAP water begins to be used, be recoverable?
- A. In Decision No. 60172, the Arizona Corporation Commission clearly found the Company's decision to obtain CAP water constituted prudent planning. The only remaining obstacle for cost recovery was meeting the "used and useful" test that had been imposed. With our commitment to the plan developed by the CAP Task Force that test has now been satisfied. Recovery is appropriate.
- Q. Why should carrying charges be allowed?
 - There are several compelling reasons. First, the Commission has imposed upon the Citizens the same test that is typically applied to justify cost recovery for plant assets. The costs of such investments are not recoverable until they are used and useful in the provision of utility service. However, during the interim period between the expenditure of funds and the ultimate date upon which the used and useful test is met, such investments are afforded a return. This occurs in the form of the Allowance for Funds During Construction ("AFDC"). AFDC, in amounts equivalent to current returns, both debt and equity, is capitalized and deferred as part of the book cost of the respective asset and recovered in future rates as part of depreciation expense. Previously accrued AFDC included in plant-inservice balances not yet recovered in depreciation provisions will continue to earn a current rate of return through its inclusion in rate base. In this instance, neither Sun City nor Sun City West has accrued any carrying charges (AFDC or otherwise) on the deferred CAP costs. Since the same ratemaking standard that applies to plant assets has been imposed upon our deferred CAP costs, it is only appropriate that the same cost recovery

opportunity, including a return on the unrecovered balance, be made available as well. We are not seeking the retroactive accrual of carrying charges. We merely request that the prospectively accrued carrying costs associated with the significant expenditure of funds that the Commission has found to be prudent be recoverable from the customers they were intended to benefit.

Second, similar circumstances should be treated in a consistent manner for cost recovery and ratemaking purposes. In Decision No. 58360 issued in July 1993, the Commission ordered that carrying charges, computed at the cost of capital, can be accrued on the balances of DSM expenditures made by Citizens' Arizona Electric Division. Such expenditures are critical to the planning process that is intended to assure that Citizens will be able to continue to supply sufficient quantities of electricity to its customers in the future. The decision to acquire CAP water, already found by the Commission to have been prudent, was also intended to assure a long-term supply, in this case of water. For the same reason that carrying charges may be accrued on DSM expenditures, Sun City and Sun City West should be allowed to reflect a rate of return in the revenue requirement calculations that underlie our requested CAP cost recovery rates.

Finally, setting aside ratemaking principles and regulatory policies for a moment, reasonableness and fairness warrant some consideration in the prospective recognition of a return on the unamortized balance of deferred CAP costs. As indicated on Schedule CWD-1, payments totaling \$160,706 (\$99,034 for Sun City and \$61,672 for Sun City West) were made in connection with the CAP allocation before we received deferral accounting authority in Commission Decision No. 58750 in August 1994. Even though

the decision to acquire CAP water was subsequently found by the Commission to have been prudent, because these payments preceded the deferral accounting order, they were charged to expense and will never be recoverable. Moreover, as summarized on Schedule CWD-5, by not having the authority to accrue carrying charges on the deferred CAP costs, Sun City and Sun City West have forgone recognition of returns totaling \$140,922 and \$83,361, respectively. In the aggregate, unrecoverable CAP payments and forgone returns total \$384,989, while at the same time Citizens' investors have borne the entire risk associated with CAP water procurement. The total of the returns implicit in the revenue requirement underlying the requested CAP recovery rates is \$108,257, less than one-third of the unrecoverable payments and forgone returns. To deny any consideration of returns prospectively is not only patently unfair, but also would continue to require Citizens' investors to bear the entire cost of acquiring CAP water and holding it for the benefit of customers.

- Q. Does this conclude your testimony?
- A. Yes it does.

PROFESSIONAL QUALIFICATIONS

- Q. What is your educational background?
- A. I graduated from the University of Nebraska with a Bachelor of Science

 Degree in Business Administration, major in Accounting. I also received a

 Master of Business Administration Degree, concentration in Finance from

 Rockhurst College in Kansas City, Missouri.
- Q. What has been your professional experience?
- A. Upon graduation from college in 1968, I was employed by the international public accounting firm Arthur Andersen & Co. in its Omaha office. During such employment, I participated in and directed audits and other engagements involving commercial banks, healthcare facilities, public utilities, insurance carriers, and other clients.

In 1971, I accepted a position reporting to the controller at Central Telephone & Utilities Corporation at its then headquarters in Lincoln, Nebraska. During the five years I was employed by CTU, I directed such activities as financial and regulatory accounting and reporting, internal auditing, budgeting, corporate acquisitions and divestitures, rate cases, and other regulatory filings, banking relations, and corporate financings.

From 1976 to 1981, I was employed by Kansas City Power & Light Company. My responsibilities included the corporate audit function, operations budgeting, and rate case filings in Kansas and Missouri and with the Federal Energy Regulatory Commission. During that period, I also served as a member of the Missouri Valley Electric Association, and the Finance and Accounting Committee of the Standardized Nuclear Unit Power Plant System.

5 6

7 8

9

10 11

12

13

15

16

14

17 18

19 20

21 22

23 24

25 26

27

28 29 From 1981 to 1991, I was employed as a Senior Project Manager for a regulatory consulting firm and successor firm, directing rate case, management audit, and other engagements for a clientele that included utility companies, public service commissions, and intervenors in regulatory proceedings.

From 1991 through 1996, I was employed as an internal consultant with Northern States Power Company in Minneapolis. My responsibilities included accounting, taxation and cost allocation issues in rate cases and special regulatory proceedings, performing capital investment evaluations, accounting and tax research, developing cost recovery plans, and advising senior management in connection with the development of performancebased ratemaking proposals and strategic policies for a successful transition to a competitive electric utility industry.

In late 1996, I accepted a position as Tax Research Coordinator for Tucson Electric Power Company. My chief responsibilities included tax research and planning, preparation and review of corporate tax returns, and meeting with representatives of tax authorities. I also served on the corporate planning team addressing industry deregulation and competitive issues, and also directed the team charged with responsibility for creating and implementing a system for strategic business units, and developing the associated accounting and financial reporting practices.

In January, 1997, I was appointed Director of Utilities for the Arizona Corporation Commission. In that capacity, I directed a staff of approximately ninety professional and clerical employees responsible for

APPENDIX A

overseeing railroad and pipeline safety in Arizona and for regulating the water, telephone, electric and natural gas distribution utilities in the State.

I accepted my current position as Vice President-Regulatory Affairs of the Public Service Sector of Citizens Utilities in February 1998. In that capacity, I coordinate regulatory activities in the ten states served by Sector utilities. In addition, I am a member of the Arizona Utility Tax Issues Group and the Arizona Corporation Commission's Water Utility Task Force.

Q. What are your professional certifications and affiliations?

A. I hold Certified Public Accountant Certificates issued by the respective Boards of Accountancy in Nebraska and Kansas. I am a member of the American Institute of Certified Public Accountants, the National Association of Radio and Telecommunications Engineers ("NARTE"), and the National Association of Railroad and Public Utility Tax Representatives.

Q. What technical licenses do you hold?

A. I hold an Advanced Class FCC Radio License and a Technician Class NARTE certification with regulatory and antennas endorsements.

Q. What is your teaching experience?

A. I have developed and conducted seminars on a variety of topics for employees of public utilities and regulatory agencies. I have also taught classes on behalf of the U.S. Telephone Association. Presently, I am a member of the faculty of the NARUC Regulatory Studies Program at the Public Utility Institute at Michigan State University. In connection with my

1 2 3 teaching, I have written three instructional books: Public Utility Income Taxation and Ratemaking, Public Utility Working Capital, and Generally Accepted Accounting Principles for Utilities.

4

5

6

What has been your experience in regulatory proceedings? Q.

7 8

9 10

11 12

13 14

15 16

17

18 19

20

21

22 23

24

25

26

27 28

- Α. During the past twenty-eight years, I have participated in numerous rate cases and other regulatory and litigation proceedings involving electric, gas transmission and distribution, telephone, water, and wastewater utilities conducted in Alaska, Arizona, California, Colorado, Connecticut, District of Columbia, Florida, Illinois, Indiana, Kansas, Maryland, Minnesota, Missouri, Nevada, New Mexico, North Carolina, North Dakota, South Dakota, Virginia, and Wisconsin, as well as proceedings before the Federal Energy Regulatory Commission and the National Energy Board of Canada. I have also spoken before legislative bodies in connection with proposed legislation. I have testified on matters involving financial and regulatory accounting and reporting, auditing, cost allocation, financial forecasting, capital and operations budgeting, taxation, corporate acquisitions, holding companies, valuation and transfer pricing, deregulation, the cost of capital, industry restructuring, and regulatory policy.

Sun City - Sun City West C.A.P. Payments 1993 - 1999

Date <u>Paid</u>	Amount Paid By Sun City Water	Allocated to Agua Fria (a)		llocated to City West (b)	emainder for City Water
Payments Not Defe	erred:				
July 1, 1993 Oct. 20, 1993 April 20, 1994 Oct. 20, 1994	\$ 79,175 71,257 95,010 166,267	\$ 48,270 43,443 57,924 101,367	\$	11,860 10,674 14,232 24,906	\$ 19,045 17,140 22,854 39,994
Payments for wh	ich Recovery is unava	ilable	\$	61,672	\$ 99,034
Payments Deferred	: :				
Oct. 31, 1994 May 26, 1995 Nov. 30, 1995 May 31, 1996 Nov. 1, 1996 April 25, 1997 Dec. 31, 1997 Dec. 31, 1997 May 29, 1998 Aug. 1, 1998	112,874 166,268 237,525 237,525 308,783 308,782 39,330 (c) 380,040 380,040 9,120 (c)	231,696 231,696	\$	16,908 24,906 35,580 35,580 46,254 46,254 56,928 56,928	\$ 27,151 39,995 57,135 57,135 74,276 74,275 39,330 91,416 91,416 9,120
Sun City/Sun City V	Vest subtotals after all	ocation	\$	319,339	\$ 561,248
Additional Payment	s:				
Dec. 31, 1998 May 28, 1999			· 	56,928 56,928	 100,536 100,536
Total Deferral for	which Recovery is be	ing sought	\$	433,195	\$ 762,320
Total Payments			\$	494,866	\$ 861,354

(a) Allocated on basis of acre feet transferred:

9,654 / 15,835 = .609662

(b) Allocated on basis of acre feet transferred:

2,372 / 15,835 = .149795

(c) Represents Youngstown - All Sun City Water

Sun City Water CAP Deferral Cost Recovery Monthly Revenue Requirements - Residential

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month Z	Month 8	Month 9	Month 10
Deferred CAP Costs Less: Accumulated Amortization Net Deferred CAP Costs Less: A.D.I.T. Net Investment	598,364 (14,247) 584,117 (229,441) 354,676	598,364 (28,494) 569,870 (223,845) 346,025	598,364 (42,741) 555,623 (218,249) 337,374	598,364 (56,988) 541,376 (212,652) 328,724	598,364 (71,235) 527,129 (207,056) 320,073	598,364 (85,482) 512,882 (201,460) 311,422	598,364 (99,729) 498,635 (195,864) 302,771	598,364 (113,976) 484,388 (190,268) 294,120	598,364 (128,223) 470,141 (184,671) 285,470	598,364 (142,470) 455,894 (179,075) 276,819
Return on Net Investment (a): L-T Debt (.2550%) Preferred Equity (.0258%) Common Equity (.4467%) Total	904 92 1,584 2,580	882 89 1,546 2,517	860 87 1,507 2,454	838 85 1,468 2,391	816 83 1,430 2,329	794 80 1,391 2,266	772 78 1,352 2,203	750 76 1,314 2,140	728 74 1,275 2,077	706 71 1,237 2,014
Amortization Expense	14,247	14,247	14,247	14,247	14,247	14,247 952	14,247	14,247	14,247	14,247
Revenue Requirement	17,911	17,822	17,733	17,643	17,554	17,464	17,375	17,286	17,196	17,107
P.V. Factor at .7275% (a)	0.992778	0.985608	0.9784892	0.971422	0.964406	0.957441	0.950526	0.94366	0.936845	0.930079
P.V. of Revenue Requirements	17,782	17,566	17,351	17,139	16,929	16,721	16,515	16,312	16,110	119,61
Total Present Value of Revenue Requirements	equirements		583,524							
Levelized Monthly Payment		"	16,174							

(a) Monthly equivalent of 8.73% annual rate of return.

Month 23	598,364 (327,681) 270,683 (106,324)	164,359	42 734	1,196	14,247	502	15,945	0.846438	13,497
Month 22	598,364 (313,434) 284,930 (111,921)	173,009	45 773	1,259	14,247	529	16,034	0.852595	13,671
Month 21	598,364 (299,187) 299,177 (117,517)	181,660	47 811	1,322	14,247	555	16,124	0.858798	13,847
Month 20	598,364 (284,940) 313,424 (123,113)	190,311	49 49 850	1,385	14,247	582	16,213	0.865046	14,025
Month 19	598,364 (270,693) 327,671 (128,709)	198,962	51 889	1,447	14,247	809	16,303	0.871339	14,205
Month 18	598,364 (256,446) 341,918 (134,305)	207,613	54 927	1,510	14,247	635	16,392	0.877678	14,387
Month 17	598,364 (242,199) 356,165 (139,902)	216,263	56 56	1,573	14,247	661	16,481	0.884063	14,571
Month 16	598,364 (227,952) 370,412 (145,498)	224,914	58 1,005	1,636	14,247	687	16,571	0.890495	14,756
Month 15	598,364 (213,705) 384,659 (151,094)	233,565		1,699	14,247	714	16,660	0.896973	14,944
Month 14	598,364 (199,458) 398,906 (156,690)	242,216	62 62 1,082	1,762	14,247	740	16,749	0.903498	15,133
Month 13	598,364 (185,211) 413,153 (162,286)	250,867	65 1,121	1,825	14,247	797	16,839	0.910071	15,325
Month 12	598,364 (170,964) 427,400 (167,883)	259,517	67 67 1,159	1,888	14,247	793	16,928	0.916692 0.910071	15,518
Month 11	598,364 (156,717) 441,647 (173,479)	268,168	004 69 1,198	1,951	14,247	820	17,018	0.923361	15,713

Month <u>36</u>	598,364 (512,888) 85,476	(33,575)	132	13	378	14,246	159	14,782	0.770318	11,387
Month 35	598,364 (498,642) 99,722	(39,171) 60,551	154	16	441	14,246	185	14,872	0.775922	11,539
Month 34	598,364 (484,396) 113,968	(44,767) 69,201	176	18	503	14,246	212	14,961	0.781567	11,693
Month 33	598,364 (470,150) 128,214	(50,362) 77,852	199	20	566	14,246	238	15,050	0.787253	11,848
Month 32	598,364 (455,904) 142,460	(55,958) 86,502	221	22	629	14,247	264	15,141	0.79298	12,006
Month 31	598,364 (441,657) 156,707	(61,555) 95,152	243.	25	692	14,247	291	15,230	0.798749	12,165
Month 30	598,364 (427,410) 170,954	(67,151) 103,803	265	27	755	14,247	317	15,319	0.80456	12,325
Month 29	598,364 (413,163) 185,201	(72,747)	287	29	818	14,247	344	15,409	0.810413	12,488
Month 28	598,364 (398,916) 199,448	(78,343) 121,105	309	31	881	14,247	370	15,498	0.816309	12,651
Month 27	598,364 (384,669) 213,695	(83,939) 129,756	331	33	944	14,247	397	15,588	0.82823 0.822248	12,817
Month 26	598,364 (370,422) 227,942	(89,536) 138,406	353	36	1,007	14,247	423	15,677	0.82823	12,984
Month 25	598,364 (356,175) 242,189	(95,132) 147,057	375	38	1,070	14,247	449	15,766	0.834255	13,153
Month 24	598,364 (341,928) 256,436	(100,728) 155,708	397	40	1,133	14,247	476	15,856	0.840324	13,324

Month 42	598,364 (598,364)	1 .	1	ı	ı	1	1	14,246	-	14,246	0.737534	10,507
Month 41	598,364 (584,118)	14,246	8,650	22	7	39	63	14,246	26	14,335	0.742899	10,650
Month 40	598,364 (569,872)	28,492	17,300	44	4	22	126	14,246	53	14,425	0.748304	10,794
Month 39	598,364 (555,626)	42,738	25,951	99	7	116	189	14,246	79	14,514	0.753748	10,940
Month 38	598,364 (541,380)	56,984	34,601	88	6	155	252	14,246	106	14,603	0.759231	11,087
Month 3Z	598,364 (527,134)	71,230	43,251	110	17	193	315	14,246	132	14,693	0.764755	11,236

Sun City Water CAP Deferral Cost Recovery Monthly Revenue Requirements - Other

	Month 1	Month 2	Month 3	Month 4	Month 5	Month <u>6</u>	Month Z	Month 8	Month 9	Month 10
Deferred CAP Costs	163,956	163,956	163,956	163,956	163,956	163,956	163,956	163,956	163,956	163,956 (39,040)
Less: Accumulated Amortization Net Deferred CAP Costs	160.052	156,148	152,244	148,340	144,436	140,532	136,628	132,724	128,820	124,916
Less: A.D.I.T.	(62,868)	(61,335)	(59,801)	(58,268)	(56,734)	(55,201)	(53,667)	(52, 134)	(20,600)	(49,067)
Net Investment	97,184	94,813	92,443	90,072	87,702	85,331	82,961	80,590	78,220	75,849
Return on Net Investment (a):	3	0,000	o c	Occ	Acc	c a t c	242	900	00	193
L-1 Debt (.2550%)	240	247 247	000	230	+77 23	200	217	23	<u>8</u> 8	2
Preferred Equity (10238%) Common Fauity (4467%)	23 434	424	413	402	392	381	371	360	349	339
Total	707	069	673	655	638	621	604	586	569	552
Amortization Expense	3,904	3,904	3,904	3,904	3,904	3,904	3,904	3,904	3,904	3,904
Income Taxes on Equity Returns	297	290	283	275	268	261	254	246	239	232
Revenue Requirement	4,908	4,884	4,859	4,835	4,810	4,786	4,761	4,737	4,712	4,688
P.V. Factor at .7275% (a)	0.992778	0.985608	0.978489	0.971422	0.964406	0.957441	0.950526	0.94366	0.936845	0.930079
P.V. of Revenue Requirements	4,873	4,813	4,755	4,696	4,639	4,582	4,526	4,470	4,415	4,360
Total Present Vlaue of Revenue Requirements	equirements	"	159,890		-					
Levelized Monthly Payment			4,432		-					,

(a) Monthly equivalent of 8.73% annual rate of return.

Month 23	163,956 (89,792) 74,164	(29,132)	115	12	201	3 904	138	4,369	0.846438	3,698
Month 22	163,956 (85,888) 78,068	(30,665)	121	12	212	3 904	145	4,394	0.852595	3,746
Month 21	163,956 (81,984) 81,972	(32,199)	127	13	777	3 904	152	4,418	0.858798	3,794
Month 20	163,956 (78,080) 85,876	(33,732) 52,144	133	13	233	3 904	159	4,443	0.865046	3,843
Month 19	163,956 (74,176) 89,780	(35,266) 54,514	139	4 2	244	3 904	167	4,467	0.871339	3,892
Month 18	163,956 (70,272)	(36,799) 56,885	145	15	254	3 904	174	4,492	0.877678	3,942
Month 17	163,956 (66,368) 97,588	(38,333)	151	15	265	3 904	181	4,516	0.884063	3,993
Month 16	163,956 (62,464)	(39,866)	157	16	275	448 9 004	188	4,541	0.890495	4,043
Month 15	163,956 (58,560)	(41,400) 63,996	163	17	286	. 400 0 60 200 6	196	4,565	0.896973	4,095
Month 14	163,956 (54,656)	(42,933) 66,367	169	17	296	483 602	203	4,590	0.903498	4,147
Month 13	163,956 (50,752)	(44,467) 68,737	175	18	307	500	210	4,614	0.910071	4,199
Month	163,956 (46,848)	(46,000)	181	18	318	3 004	217	4,639	0.923361 0.916692 0.910071 0.903498	4,252
Month 11	163,956 (42,944)	(47,534)	187	19	328	535	225	4,663	0.923361	4,306

Month <u>36</u>	163,956 (140,538) 23,418	(9,199) 14,219	36	4 4	103	3,903	43	4,050	0.770318	3,120
Month 35	163,956 (136,635) 27,321	(10,732) 16,589	42	4 4	121	3,903	51	4,074	0.775922	3,161
Month 34	163,956 (132,732) 31,224	(12,265) 18,959	48	5	138	3,903	58	4,099	0.781567	3,204
Month 33	163,956 (128,829) 35,127	(13,798) 21,329	54	6 8	155	3,903	65	4,123	0.787253	3,246
Month 32	163,956 (124,926) 39,030	(15,331)	. 09	970	172	3,903	72	4,148	0.79298	3,289
Month 31	163,956 (121,023) 42,933	(16,864) 26,069	99	7 118	190	3,903	80	4,172	0.798749	3,333
Month 30	163,956 (117,120) 46,836	(18,397) 28,439	73	7	207	3,904	87	4,198	0.80456	3,377
Month 29	163,956 (113,216) 50,740	(19,931)	6/	730 8	224	3,904	94	4,222	0.810413	3,422
Month 28	163,956 (109,312) 54,644	(21,464)	85	0 0	241	3,904	101	4,247	0.816309	3,467
Month 2Z	163,956 (105,408) 58,548	(22,998)	91	9	259	3,904	109	4,271	0.822248	3,512
Month 26	163,956 (101,504) 62 452	(24,531)	. 26	10	276	3,904	116	4,296	0.82823	3,558
Month 25	163,956 (97,600) 66,356	(26,065)	103	10	293	3,904	123	4,320	0.834255	3,604
Month 24	163,956 (93,696) 70,260	(27,598)	109	1 5	310	3,904	130	4,345	0.840324	3,651

Month 42	163,956 (163,956)		1		,	1	ı	3,903		3,903	0.737534	2,879	
Month 41	163,956 (160,053)	3,903	2,370		· —	7	17	3,903	7	3,927	0.742899	2,918	
Month	163,956 (156,150)	7,806	4,740	12	i ←	21	34	3,903	14	3,952	0.748304	2,957	
Month 39	163,956 (152,247)	11,709	7,110	α.	2 2	32	52	3,903	22	3,976	0.753748	2,997	
Month 38	163,956 (148,344)	15,612	9,480	AC	5	42	69	3,903	29	4,001	0.759231	3,038	
3 <u>7</u>	163,956 (144,441)	19,515	11,850	J.) က	53	86	3,903	36	4,025	0.764755	3,078	

Sun City West CAP Deferral Cost Recovery Monthly Revenue Requirements - Residential

	Month 1	Month 2	Month 3	Month 4	Month 5	Month ©	Month Z	Month 8	Month 9	Month 10	
Deferred CAP Costs Less: Accumulated Amortization	371,177 (8,838)	371,177 (17,676)	371,177 (26,514)	371,177	371,177 (44,190)	371,177 (53,028)	371,177 (61,866)	371,177 (70,704)	371,177 (79,542)	371,177 (88,380)	
Net Deferred CAP Costs Less: A.D.I.T.	362,339	353,501 (138,855)	344,663 (135,384)	335,825 (131,912)	326,987 (128,440)	318,149 (124,969)	309,311 (121,497)	300,473 (118,026)	291,635 (114,554)	282,797 (111,083)	
Net Investment	220,012	214,646	209,279	203,913	198,547	193,180	187,814	182,447	177,081	171,714	
Return on Net Investment (a): L-T Debt (.2550%)	561	547	534	520	506	493	479	465	452	438	
Preferred Equity (.0258%)	25	55	54	53	51	20	48	47	46	44	
Common Equity (.4467%)	983	959	935	911	887	863	839	815	791	767	
Total	1,601	1,562	1,523	1,483	1,444	1,405	1,366	1,327	1,288	1,249	
Amortization Expense	8,838	8,838	8,838	8,838	8,838	8,838	8,838	8,838	8,838	8,838	
Income Taxes on Equity Returns	672	656	640	623	607	290	574	558	541	525	
Revenue Requirement	11,111	11,056	11,000	10,945	10,889	10,834	10,778	10,723	10,668	10,612	
P.V. Factor at .7275% (a)	0.992778	0.992778 0.985608	0.9784892	0.971422	0.964406	0.957441	0.950526	0.94366	0.936845	0.930079	
P.V. of Revenue Requirements	11,031	10,897	10,764	10,632	10,502	10,373	10,245	10,119	9,994	9,870	
Total Present Value of Revenue Requirements	equirements		361,971		-						
Levelized Monthly Payment	•	II	10,033		- -	•					100

(a) Monthly equivalent of 8.73% annual rate of return.

_	77 (74)	252	21	260	56	455	742	38	312	91	138	72
Month 23	371,177 (203,274) 167,903	(65,952)	101,951	8		4	_	8,838	3	9,891	0.846438	8,372
Month 22	371,177 (194,436)	(69,424)	107,317	274	28	479	781	8,838	328	9,947	0.852595	8,481
Month 21	371,177 (185,598)	(72,895)	112,684	287	29	503	820	8,838	344	10,002	0.858798	8,590
Month 20	371,177 (176,760)	(76,367)	118,050	301	30	527	859	8,838	361	10,058	0.865046	8,700
Month 19	371,177 (167,922)	(79,839)	123,416	315	32	551	868	8,838	377	10,113	0.871339	8,812
Month 18	371,177 (159,084)	212,093 (83,310)	128,783	328	33	275	937	8,838	394	10,169	0.877678	8,925
Month 17	371,177 (150,246)	220,931 (86,782)	134,149	342	35	599	926	8,838	410	10,224	0.884063	6:036
Month 16	371,177 (141,408)	229,769 (90,253)	139,516	356	36	623	1,015	8,838	426	10,279	0.890495	9,154
Month 15	371,177 (132,570)	238,607 (93,725)	144,882	369	37	647	1,054	8,838	443	10,335	0.896973	9,270
Month 14	371,177 (123,732)	247,445 (97,196)	150,249	383	39	671	1,093	8,838	459	10,390	0.903498	9,388
Month 13	371,177 (114,894)	256,283 (100,668)	155,615	397	40	695	1,132	8,838	476	10,446	0.916692 0.910071 0.903498	9,506
Month 12	371,177 (106,056)	265,121 (104,140)	160,981	411	42	719	1,171	8,838	492	10,501	0.916692	9,626
Month 11	371,177 (97,218)	273,959 (107,611)	166,348	424	43	743	1,210	8,838	508	10,557	0.923361	9,748

Month 36	371,177 (318,155) 53,022 (20,827)	32,195	82 8 44	234	8,837	98	9,170	0.770318	7,064
Month 35	371,177 (309,318) 61,859 (24,298)	37,561	95 10 168	273	8,837	115	9,225	0.775922	7,158
Month 34	371,177 (300,481) 70,696 (27,769)	42,927	109 11 192	312	8,837	131	9,281	0.781567	7,253
Month 33	371,177 (291,644) 79,533 (31,241)	48,292	123 12 216	351	8,837	148	9,336	0.787253	7,350
Month 32	371,177 (282,807) 88,370 (34,712)	53,658	137 14 240	390	8,837	164	9,391	0.79298	7,447
Month 31	371,177 (273,970) 97,207 (38,183)	59,024	15 15 264	429	8,837	180	9,447	0.798749	7,546
Month 30	371,177 (265,133) 106,044 (41,654)	64,390	154 17 288	468	8,837	197	9,502	0.80456	7,645
Month 29	371,177 (256,296) 114,881 (45,125)	69,756	1/8 18 312	207	8,837	213	9,558	0.810413	7,746
Month 28	371,177 (247,459) 123,718 (48,596)	75,122	19 19 336	547	8,837	230	9,613	0.816309	7,847
Month 27	371,177 (238,622) 132,555 (52,068)	80,487	202 21 360	586	8,837	246	699'6	0.822248	7,950
Month 26	371,177 (229,785) 141,392 (55,539)	85,853	21 22 384	625	8,837	262	9,724	0.82823	8,054
Month 25	371,177 (220,948) 150,229 (59,010)	91,219	24 407	664	8,837	279	9,779	0.840324 0.834255	8,159
Month 24	371,177 (212,111) 159,066 (62,481)	96,585	240 25 431	703	8,837	295	9,835	0.840324	8,264

Month 42	371,177	1	1	• •	1	8,837	8,837	0.737534	6,518
Month 41	371,177 (362,340) 8,837	(3,471) 5,366	14	1 24	39	8,837	8,892	0.742899	909'9
Month 40	371,177 (353,503) 17,674	(6,942) 10,732	72	48	78	8,837	8,948	0.748304	969'9
Month 39	371,177 (344,666) 26,511	(10,414)	41	4 72	117	8,837	6,003	0.753748	6,786
Month	371,177 (335,829) 35,348	(13,885) 21,463	55	ა გ	156	8,837 66	9,059	0.759231	6,878
Month 37	371,177 (326,992) 44,185	(17,356) 26,829	89	7	195	8,837	9,114	0.764755	6,970

Sun City West CAP Deferral Cost Recovery Monthly Revenue Requirements - Other

	Month	Month 2	Month 3	Month 4	Month 5	Month 6	Month Z	Month 8	Month 9	Month 10
Deferred CAP Costs	62,018	62,018 (2.954)	62,018 (4,431)	62,018 (5,908)	62,018 (7,385)	62,018	62,018 (10,339)	62,018 (11,816)	62,018 (13,293)	62,018 (14,770)
Net Deferred CAP Costs	60,541	59,064	57,587	56,110	54,633	53,156 (20,880)	51,679 (20,300)	50,202 (19,719)	48,725 (19,139)	47,248 (18,559)
Less: A.D.I. I. Net Investment	36,760	35,864	34,967	34,070	33,173	32,276	31,379	30,483	29,586	28,689
Return on Net Investment (a):			C	0	o u	C	Ö	82	7,	73
L-T Debt (.2550%)	94	<u> </u>) 0	ò a	ဥ	, «	3 «	o 00	, co	<u>`</u>
Preferred Equity (.0258%)	164	160	156	152	148	144	140	136	132	128
Total	267	261	254	248	241	235	228	222	215	209
Amortization Expense	1,477	1,477	1,477	1,477	1,477	1,477	1,477	1,477	1,477	1,477
Income Taxes on Equity Returns	112	110	107	104	101	66	96	93	06	88
Revenue Requirement	1,857	1,848	1,838	1,829	1,820	1,810	1,801	1,792	1,783	1,773
P.V. Factor at .7275% (a)	0.992778	0.985608	0.978489	0.971422	0.964406	0.957441	0.950526	0.94366	0.936845	0.930079
P.V. of Revenue Requirements	1,843	1,821	1,799	1,777	1,755	1,733	1,712	1,691	1,670	1,649
Total Present Vlaue of Revenue Requirements	equirements	u	60,480		·					
Levelized Monthly Payment			1,676		-					

(a) Monthly equivalent of 8.73% annual rate of return.

Month 23	62,018 (33,971) 28,047	17,030	43	4	9/	124	1,477	52	1,653	0.846438	1,399
Month 22	62,018 (32,494) 29,524	17,927	46	5	8	130	1,477	55	1,662	0.852595	1,417
Month 21	62,018 (31,017) 31,001	18,824	48	5	84	137	1,477	58	1,671	0.858798	1,435
Month 20	62,018 (29,540) 32,478	19,721	20	5	88	143	1,477	09	1,681	0.865046	1,454
Month 19	62,018 (28,063) 33,955	20,617	53	5	92	150	1,477	63	1,690	0.871339	1,473
Month 18	62,018 (26,586) 35,432	21,514	55	9	96	157	1,477	99	1,699	0.877678	1,491
Month 17	62,018 (25,109) 36,909	22,411	57	9	100	163	1,477	69	1,709	0.884063	1,510
Month 16	62,018 (23,632) 38,386	23,308	59	9	104	170	1,477	71	1,718	0.890495	1,530
Month 15	62,018 (22,155) 39,863	24,205	62	o	108	176	1,477	74	1,727	0.896973	1,549
Month	62,018 · (20,678) 41,340	25,102	64	9	112	183	1,477	77	1,736	0.903498	1,569
Month 13	62,018 (19,201) 42,817	25,998	99	7	116	189	1,477	62	1,746	0.916692 0.910071 0.903498	1,589
Month 12	62,018 (17,724) 44,294	26,895	69	7	120	196	1,477	82	1,755	0.916692	1,609
Month 11	62,018 (16,247) 45,771	27,792	71	7	124	202	1,477	85	1,764	0.923361	1,629

Month 36	62,018 (53,162) 8,856 (3,479)	5,377	14 1 24 24	39	1,476	16	1,532	0.770318	1,180
Month 35	62,018 (51,686) 10,332 (4,058)	6,274	16 28 28	46	1,476	19	1,541	0.775922	1,196
Month 34	(50,210) (11,808) (4,638)	7,170	18 32 32	52	1,476	22	1,550	0.781567	1,211
Month 33	(48,734) (13,284 (5,218)	8,066	21 2 36	59	1,476	25	1,559	0.787253	1,228
Month 32	62,018 (47,258) 14,760 (5,798)	8,962	23 2 40	65	1,476	27	1,569	0.79298	1,244
Month 31	62,018 (45,782) 16,236 (6,378)	9,858	25 3 44	72	1,476	30	1,578	0.798749	1,260
Month 30	62,018 (44,306) 17,712 (6,957)	10,755	27 3	78	1,476	33	1,587	0.80456	1,277
Month 29	62,018 (42,830) 19,188 (7,537)	11,651	30 3 52	85	1,476	36	1,596	0.810413	1,294
Month 28	62,018 (41,354) 20,664 (8,117)	12,547	32 3	91	1,476	38	1,606	0.816309	1,311
Month 27	62,018 (39,878) 22,140 (8,697)	13,443	34	86	1,476	41	1,615	0.822248	1,328
Month 26	62,018 (38,402) 23,616 (9,276)	14,340	37 4	104	1,477	44	1,625	0.82823	1,346
Month <u>25</u>	62,018 (36,925) 25,093	15,236	39 4 89	111	1,477	47	1,634	0.834255	1,364
Month 24	62,018 (35,448) 26,570 (10,437)	16,133	41 472	117	1,477	49	1,644	0.840324	1,381

Month	62,018 (62,018)		1	ı	1	1	1	1,476	ı	1,476	0.737534	1,089
Month 41	62,018 (60,542)	1,476	(580)	2	0	4	7	1,476		1,485	0.742899	1,103
Month 40	62,018 (59,066)	2,952	(1,160)	ວ	0	∞	13	1,476	5	1,495	0.748304	1,118
Month 39	62,018 (57,590)	4,428	(1,739)	7	~	12	20	1,476	8	1,504	0.753748	1,133
Month 38	62,018 (56,114)	5,904	(2,319)	o	Υ-	16	26	1,476	11	1,513	0.759231	1,149
Month 37	62,018 (54,638)	7,380	(2,899)	7	Ψ-	20	33	1,476	14	1,522	0.764755	1,164

Calculation of Deferral Allocations and Collection Rate

Sun City Water	Volumes (1,000 gal.) Forecasted For Yr. 2000	% of Total	Allocation of Deferral Balance	Monthly Revenue Requirement	Billing <u>Determinants</u>	Customer Rate (c)
Our Ony Water						
Residential	3,578,801	78.49	\$ 598,364	\$ 16,174	29,397 (a) \$ 0.5502
Commercial, Irrigation and OPA	980,614	21.51	163,956	4,432	81,718 (b) \$ 0.0542
Total	4,559,415	100.00	\$ 762,320			
Sun City West						
Residential	1,698,495	85.68	\$ 371,177	\$ 10,033	16,806 (a) \$ 0.5970
Commercial	283,791	14.32	62,018	1,676	23,649 (b	0.0709
Total	1,982,286	100.00	\$ 433,195			

⁽a) Forecasted average number of customers for the year 2000

⁽b) Forecasted average monthly consumption (1,000 gallons) for the year 2000

⁽c) Monthly Revenue Requirement divided by Billing Determinants

CAP Holding and Delivery Charges 2000 - 2004 Sun City Water

	2000	2001	2002	2003		2004
MDW Costs (per acre-foot): Capital charge Delivery charge MVD Offset	\$ 48 54 (16)	\$ 54 59 (16)	\$ 54 68 (16)	\$ 54 71 (16)	\$	54 75 (16)
Total	\$ 86	\$ 97	\$ 106	\$ 109	\$	113
Allocated Acre Feet	 4,189	4,189	 4,189	 4,189	•	4,189
Total Payment to Recover	\$ 360,254	\$ 406,333	\$ 444,034	\$ 456,601	\$	473,357
Residential Allocation (a)	282,763	318,931	 348,522	358,386		371,538
Annual Monthly Bills	352,759	352,759	352,759	352,759		352,759
Monthly Charge per Household	\$ 0.8016	\$ 0.9041	 0.9880	\$ 1.0160	\$	1.0532
Other Customers Allocation (b)	77,491	87,402	95,512	98,215	*	101,819
Annual Consumption (1,000 gal.)	980,614	980,614	980,614	980,614		980,614
Monthly Charge per 1,000 gal.	\$ 0.0790	\$ 0.0891	\$ 0.0974	\$ 0.1002	\$	0.1038

⁽a) 78.49% allocated to residential customers

⁽b) 21.51% allocated to other customers

CAP Holding and Delivery Charges 2000 - 2004 Sun City West Water

		2000		2001	2002	2003		2004
MDW Costs (per acre-foot): Capital charge Delivery charge MVD Offset	\$	48 54 (16)	\$	54 59 (16)	\$ 54 68 (16)	\$ 54 71 (16)	\$	54 75 (16)
Total	\$	86	\$	97	\$ 106	\$ 109	\$	113
Allocated Acre Feet		2,372		2,372	 2,372	 2,372	. ——	2,372
Total Payment to Recover	\$	203,992	\$	230,084	\$ 251,432	\$ 258,548	\$	268,036
Residential Allocation (a)		174,780		197,136	215,427	221,524		229,653
Annual Monthly Bills		201,676		201,676	201,676	201,676		201,676
Monthly Charge per Household	_\$_	0.8666	\$	0.9775	\$ 1.0682	\$ 1.0984	\$	1.1387
				•				
Other Customers Allocation (b)		29,212		32,948	36,005	37,024		38,383
Annual Consumption (1,000 gal.)		283,790		283,790	283,790	283,790		283,790
Monthly Charge per 1,000 gal.	\$	0.1029	\$	0.1161	\$ 0.1269	\$ 0.1305	\$	0.1353

⁽a) 85.68% allocated to residential customers

⁽b) 14.32% allocated to other customers

Sun City - Sun City West Forgone Returns

		Sun Ci	tv Water	Sun City West			
Computation Period	No. of Months	Cumulative Amount <u>Paid</u>	Foregone Returns (a)	Cumulative Amount <u>Paid</u>	Foregone Returns (a)		
11/94 - 1/95	3	\$ 27,151	\$ 668	\$ 16,908	\$ 416		
2/95 - 5/95	4	27,151	869	16,908	555		
6/95 - 11/95	. 6	67,146	3,223	41,814	2,057		
12/95 - 5/96	6	124,281	5,965	77,394	3,808		
6/96 - 10/96	5	181,416	7,257	112,974	4,632		
11/96 - 4/97	6	255,692	12,273	159,228	7,834		
5/97 - 12/97	8	329,967	19,204	205,482	11,959		
1/98 - 5/98	5	460,713	16,758	262,410	9,545		
6/98 - 7/98	2	552,129	8,033	319,339	4,646		
8/98 - 12/98	5	561,249	20,415	319,339	11,616		
1/99 - 5/99	5	661,785	24,072	376,267	13,687		
6/99 - 9/99	4	762,320	22,184	433,195	12,606		
			\$ 140,922		\$ 83,361		

(a) Reflects authorized rates of return:

Decision No. 55885 (SC & SCW) 9.84%, effective 7/1/87

Decision No. 57741 (SC) 9.6%, effective 2/1/95

Decision No. 60172 (SC & SCW) 8.73%, effective 5/1/97

INTRODUCTION

- 2 | Q. Please state your name and business address.
 - A. My name is Ray L. Jones. My business address in 15626 N. Del Webb Blvd., Sun City, Arizona 85351.
 - Q. Are you the same Ray L. Jones who presented pre-filed direct testimony in these proceedings of behalf of Sun City Water Company and Sun City West Utilities Company (collectively, "Citizens")?
 - A. Yes, I am.
- 11 || Q. What is the purpose of your testimony
 - A. I am rebutting the testimony of Ms. Charlesworth on behalf of the Sun City
 Taxpayer's Association and Messrs. Fernandez and Scott on behalf of the
 Commission Staff.

REBUTTAL -- SUN CITY TAXPAYERS ASSOCIATION

- Q. Please summarize the testimony of Mary Elaine Charlesworth concerning the CAP Task Force's CAP use plan and Citizen's request to obtain approval of the plan?
- A. Despite claiming to recognize that CAP water represents a critical and important renewable water resource for central Arizona, SCTA does not support the CAP Task Forces' CAP use plan. Additionally, despite citing alternative plans developed by Mr. Dennis Hustead, SCTA's engineering consultant, Ms. Charlesworth testifies that SCTA does not support any of the CAP water use alternatives developed by Mr. Hustead or any other CAP water use alternative.

- Q. How does SCTA justify its position?
- A. Ms. Charlesworth's testimony provides the following arguments to support her position.
 - 1. The costs of using CAP water exceed the demonstrable benefits to the ratepayers.
 - 2. The costs of using CAP water, which provide benefits of a regional nature, should be borne by the entire region.
 - Citizens' November 1984 analysis of CAP options relied upon different factors than does Citizens' current position and provides evidence that Citizens contracted for CAP water only to protect its shareholders.
 - 4. The CAP Task Force's CAP use plan is not prudent because it contains unnecessary and costly components and other better alternatives exist.
- Q. Do you agree with SCTA's position that using CAP water in the Sun Cities can only be justified by proving that the demonstrable direct benefits of the selected CAP plan to the Sun Cities are in excess of the costs?
 - No. This is not an appropriate standard. As more fully explained in my direct testimony, in August 1995 Citizens filed a Joint Application for rate relief. As a part of this application, Citizens requested recovery of CAP-related expenses. In that case, the relative costs and benefits (both direct and indirect) of CAP water were discussed in detail. In Decision 60172, the Commission provided only two reasons why Citizens' request for cost recovery was denied. They were 1) CAP water was not used and useful; and 2) Citizens did not have a definite plan to use CAP water; therefore its ultimate use was uncertain and not a known and measurable event.

Q.

- വ

Sun Cities is prudent?

A. Yes. The following findings in Decision 60172 confirm that the Commission

Has the Commission already determined that the use of CAP water in the

- A. Yes. The following findings in Decision 60172 confirm that the Commission has already determined that the use of CAP water in Sun City is prudent and provides sufficient direct and indirect benefits to justify the cost.
 - 1) The demand of existing customers is contributing to the groundwater depletion of the aquifer, land subsidence, and other environmental damage (Decision 60172, p. 9, 3-5).
 - 2) The consequences of such excessive groundwater withdrawal include decreased water levels, diminished water quality, well failures, increased pumping costs, and more land subsidence (Decision 60172, p. 9, 5-7).
 - 3) Citizens' decision to obtain CAP water was a prudent planning decision (Decision 60172, p. 9, 10,11).
 - 4) Citizens contracted for CAP in order to meet the continuing groundwater requirements for its existing customers, and that, provided the CAP allocation will ultimately be used, the existing customers will benefit from the CAP allocation by contributing to the use of renewable sources of water that will be used in the Northwest Valley to prevent diminished water quality, well failures, and future additional land subsidence, and thereby protect their economic investment in the area (Decision 60172, p. 9, 20-23; p.10, 1-3).
 - 5) The Commission did not allow Citizens to collect a surcharge for CAP costs. Instead, subject to the condition that Citizens develop a plan and date of implementation by December 31,

2000, Citizens was allowed to defer CAP capital costs for future rate recovery when the CAP water is put to beneficial use for Citizens' ratepayers (Decision 60172, p. 10, 14-16).

4 5

6

7

8

9

Clearly, the Commission has determined that the overall benefits of CAP water use exceed the costs. The only remaining issue is what CAP water use plan to implement. The Commission should ignore Ms. Charlesworth's irrelevant testimony that seeks to revisit issues the Commission has already decided.

10

11

Α.

Q. What is the appropriate standard to use in this case?

resource, requiring the community to be deeply involved in the decisionmaking process. Further, since there is no single correct plan for using CAP water, selecting the correct option for CAP-water use in a community

16 17

the community's unique assessment of the resulting benefits. The baseline

requires the community to weigh the costs of the available options against

As explained in my direct testimony (p. 6 & 7), CAP water is a community

18

19

set by the Commission is that use of CAP water is beneficial. It is up to the community to determine which option is most beneficial.

20

21

Q. Did the CAP Task Force weigh the costs of the available options against the community's unique assessment of the resulting benefits?

2223

A. Yes, it did. This was the primary function of the CAP Task Force. The result of its evaluation is well documented in the Final Report. The CAP Task Force independently developed the criteria used to evaluate the

25

26

24

options. Using sophisticated computer techniques and public input, the CAP

27

Task Force prioritized the criteria. Finally, each project was evaluated against the criteria.

- 1 2 3
- 4 5
- 6
- 7 8
- 9
- 10 11
- 12
- 13
- 14
- 15 16
- 17
- 18
- 19 20
- 21
- 2223
- 24
- 2526
- 27
- 28

- Q. Did the CAP Task Force conclude that the proposal currently before the Commission is the proposal that provides the most benefit to the communities of Sun City, Sun City West, and Youngtown?
- A. Yes, the CAP Task Force's recommended plan is clearly the plan the communities of Sun City, Sun City West, and Youngtown have concluded provides them the most benefits.
- Q. Do you agree with SCTA's position that the costs of using CAP water, which provide benefits of a regional nature, should be borne by the entire region?
- No, I do not agree with this position. The issue of allocation of the contract Α. costs associated with CAP water has been decided by the United States and the State of Arizona. In 1971 the State of Arizona enacted legislation allowing the Central Arizona Water Conservation District (CAWCD) to be formed. This legislation also established the powers and obligations of the CAWCD, including establishing the authority of CAWCD to collect revenues. On December 15, 1972, the US and Central Arizona Water Conservation District (CAWCD) entered into a contract for Delivery of Water and Repayment of Costs of the Central Arizona Project (Master Repayment Agreement). This Master Repayment Agreement establishes what portion of the costs associated with CAP water are to be borne by the State of Arizona through the CAWCD. Under its statutory authority, the CAWCD entered into subcontracts with Citizens for repayment of certain portions of the CAP related costs CAWCD incurs. The actual obligation of Citizens is set annually by the Board of the CAWCD when it issues its annual pricing schedule. When establishing its pricing the Board establishes the balance between regional revenue sources, such as property tax assessments, and subcontractor payment obligation (local revenue). Once the publicly elected Board of CAWCD establishes Citizens' obligation, Citizens (and

ultimately its customers) will then pay the appropriate fair share. Just as Citizens and its customers are not required to reimburse surrounding communities for regional benefits derived from CAP water used outside of Citizens' service territory, other entities that receive a regional benefit from Citizens' use of CAP water, do not have to reimburse Citizens for these benefits.

With respect to costs associated with the construction and operation of any CAP project implemented by Citizens for Sun City or Sun City West, the same principles apply. The amount of regional vs. direct benefit is irrelevant. Whatever the project, and whatever the perceived split between regional and direct benefits, the only entities required to pay the costs are, in this case, Citizens and its customers. There simply is no option to require any entity, which may receive an incidental benefit from a project to pay for receiving that benefit.

- Q. Do you agree with Ms. Charlesworth's characterizations of Citizens'

 November 1984 analysis of CAP options as relying upon different factors
 than the current position of Citizens and as providing evidence that Citizens
 contracted for CAP water only to protect its shareholders?
- A. No, I do not. Ms. Charlesworth misrepresents the analysis conducted by David Chardavoyne, then Vice-President of the Citizens' Water Sector. She depicts Citizens as concerned only with protecting shareholder interests. In fact the analysis is comprehensive in that it attempts to outline all advantages and disadvantages associated with various CAP water options. The memo appropriately considers customer, developer, neighboring

community, and shareholder interests. A thorough reading of the analysis reveals that Citizens properly considered all interested parties before making a decision to contract for CAP water.

Specifically, the analysis shows that acceptance of all or part of the allocation presents a risk to shareholders, because no recovery mechanism was in place in 1984. Mr. Chardavoyne's only mention of shareholder risk being lessened is under the "rejection of allocation" alternative. In other words, if Citizens wanted to reduce shareholder risk in 1984, then Citizens would have elected not to enter into a CAP subcontract. Additionally, the Chardavoyne analysis specifically mentions (three times) concerns about the loss of the groundwater supply and the impact that loss would have on customers, including diminished existence for customers, enactment of stringent water conservation measures and no alternative supplies.

- Q. Does Commission Decision 60172 address this issue?
- A. Yes, it does. On page 9, line 20 of the Decision, it states, in part:

"We find . . . that the Company contracted for CAP water in order to meet the continuing groundwater requirements for its existing customers as well as help it provide sufficient water to service all of its service areas at ultimate development."

- Q. Do you agree with SCTA's position that the CAP Task Force's CAP water-use plan is not prudent because it contains unnecessary and costly components and other better alternatives exist?
- A. No, I do not. As is explained in the rebuttal testimony of Mr. Blaine Akine,
 Mr. Hustead has drawn erroneous conclusions regarding the plan. Ms.
 Charlesworth has relied upon these erroneous conclusions in stating SCTA's position.

- 1 2
- 3
- 4 5
- 6
- 7 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28 29

- Would you comment on SCTA's recommendation that cost recovery of Q. deferred CAP costs be denied?
- In his rebuttal testimony Mr. Carl Dabelstein addresses why the costs should be recovered as proposed by Citizens. I agree with Mr. Dabelstein's comments and will not duplicate his testimony. I will, however, point out errors in the justification of the SCTA's position.

SCTA believes that recovery should be denied because Citizens could have implemented the current CAP plan or any other CAP use plan fourteen years ago. SCTA further concludes that by doing so Del Webb and other developers could have been required to finance most, if not all, of the CAP costs. SCTA is incorrect in both of its positions.

First, State statutes did not permit an indirect or in-lieu recharge, as proposed by the CAP Task Force, until 1990. The Maricopa Water District Groundwater Savings Facility was not permitted until 1998. Further, as is evidenced by this case and previous Citizens filings related to CAP, projects of this magnitude require several years to become reality from the time planning begins. The Agua Fria Recharge project is another good example. Despite the best efforts and intentions of CAWCD, they have been unable to construct and permit their facility in accordance with their original timetable projecting completion in 1999. The project is now expected to be operational in 2000. It is clearly wrong to state that the proposed project or the alternative projects could have been implemented fourteen years ago.

Second, Del Webb had built-out Sun City by 1978, seven years before Citizens signed its CAP contracts. With respect to Sun City West, a master

REBUTTAL TESTIMONY OF RAY L. JONES
CITIZENS UTILITIES COMPANY
W-01656A-98-0577
SW-02334A-98-0577

development agreement was signed in 1978, again seven years before Citizens signed a CAP subcontract. Clearly, Del Webb cannot be expected to retroactively fund the CAP costs that are the subject of this case – the earliest of which were incurred in 1995.

Finally, development by entities other than Del Webb in the Sun City and Sun City West service areas is of insufficient size to fund the deferred CAP costs. In any event, new developments are required to join the Central Arizona Groundwater Replenishment District, which taxes those developments to pay for CAP water replenished on their behalf. Citizens' use of CAP water does little to reduce this replenishment obligation. Since these developments are essentially purchasing their own separate CAP supply, it would be inappropriate to require them to pay CAP costs that benefit the other customers of Citizens. Citizens' cost recovery proposal correctly allocates the costs to all of Citizens' customers who equally benefit from its use.

REBUTTAL - ARIZONA CORPORATION COMMISSION STAFF

- Q. Do you agree with Staff's recommendation that the Commission reject Citizens' request for an order approving the general concept of the construction of a pipeline to the golf courses as a reasonable and prudent approach for implementing the long-term solution for the utilization of CAP water in the Sun Cities?
- A. No, I do not agree with this recommendation. I believe that this order is absolutely necessary to insure that CAP water will be used in the Sun Cities.

- 1
- Q. Please explain your position?
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- ___
- 1112
- 13
- 14
- 15
- 16
- 17 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29

- A. To date, Citizens has invested over \$1.5 million in CAP capital charges.

 Several hundred thousand dollars in additional expenses have been
 - incurred for water resource studies, cost analysis, and for supporting the
 - CAP Task Force. Of these costs Citizens is asking for recovery of only
 - \$1,356,220. In December an additional \$423,696 in capital charges will be
 - due. Most importantly, the next step in the process of implementing the
 - CAP Task Force's water-use plan will be extensive preliminary engineering
 - and coordination phase that will require dedication of full-time staff and
 - extensive outside engineering services. Citizens cannot be expected to
 - incur these levels of expenditures without the Commission finding that the
 - golf course option proposed by the CAP Task Force is a reasonable and
 - prudent approach for implementing the long-term solution for the utilization
- of CAP water in the Sun Cities.
- Q. Do you agree with Staff's characterization of Citizens requested order as an
- Accounting Order?
- A. No, I do not. Citizens is not requesting pre-approval of any actual
 - expenditures. Citizens is not requesting any special treatment of the
 - expenditures it incurs. In simple terms, Citizens is asking the Commission
 - to find that the plan proposed by the CAP Task Force is the correct plan to
 - implement in the Sun Cities. This level of approval would not constitute an
 - Accounting Order.
- Q. Why is it appropriate for the Commission to issue this order?
- $\|A$. I fully address this in my Direct Testimony beginning on page 8, line 15.
 - Summarizing, there is no single correct plan for using CAP water in the Sun
 - Cities. The Commission is the only elected body with the authority to make

the needed decision. While the Task Force's plan represents the consensus position of the community, it is not binding. Given the significant costs and long-term implications to the communities of the selected CAP option, it is appropriate to have the CAP Task Force's recommendation approved by the Commission.

Q. Do you agree with Staff's recommendation to require Citizens to file an financing application in this matter?

No, I do not. Citizens is prepared to fund this project using existing

10 so 11 Du 12 pr 13 co

Α.

sources of capital with the application of an Allowance for Funds Used
During Construction in accordance with standard Commission-approved
practices. Should an alternative financing method be identified prior to
constructing the project, Citizens would file for any Commission approvals
that are required to utilize the alternative financing.

Q. Is it appropriate for the Brown and Caldwell cost estimate for the CAP Task Force's recommended CAP water-use plan to be relied upon by the Commission in making a decision to approve the plan?

Yes, it is. As is noted by Staff witnesses Mr. Marlin Scott, the cost estimate is conservative. In other words, when an actual condition is not known, the engineer assigns sufficient cost to insure that the project can likely be constructed within the estimated amount under all likely scenarios. For example, the Brown and Caldwell estimate includes costs for booster facilities even though it may be possible to operate the system by gravity. By making the estimate conservative, the CAP Task Force insured that the Commission could rely upon the estimate, since it is unlikely that the actual costs will exceed the estimate.

- 7 |

- 2.0

- Q. If actual costs are lower than the Brown and Caldwell estimate should the Commission be concerned?
- A. No. To the extent that the actual costs are lower than the estimate, this strengthens the conclusion that the CAP Tasks Force's plan is the most beneficial plan for Sun City, Sun City West, and Youngtown.
- Q. Will cost recovery for the project be based on actual costs?
- A. Yes, the Commission will use actual costs as the basis for establishing Citizens cost recovery for the project.
- Q. Has the Brown and Caldwell cost estimate been independently reviewed?
- A. Yes it has. As described in the Statement of the CAP Task Force, the Sun City Homeowners Association, supported by a grant from the Arizona Department of Water Resources, contracted with Entranco to review the Brown and Caldwell estimate and make its own estimate of the projected infrastructure costs. The Entranco engineering report confirmed that the estimates made in the Brown and Caldwell report are reasonable.
- Q. Does this conclude your testimony?
- A. Yes, it does.

INTRODUCTION

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

- Q. Please state your name, title and business address.
- A. My name is Terri Sue C. Rossi. I am the Manager of Water Resources for Citizens Water Resources. My business address is 15626 N. Del Webb Boulevard, Sun City, Arizona 85375.
- Q. Are you the same Terri Sue C. Rossi who presented pre-filed direct testimony in these proceedings on behalf of Sun City Water Company and Sun City West Utilities Company (collectively "Citizens")?
- A. Yes, I am.
- Q. Did you participate in the CAP Task Force?
- A. I was a member of the CAP Task Force representing Citizens and attended all Task Force meetings. I was also the project manager for the Task Force as a work product.
- Q. What is the purpose of your rebuttal testimony?
- A. I am rebutting the direct testimonies of Mary Elaine Charlesworth for the Sun City Taxpayers Association ("SCTA") and Marylee Diaz Cortez for the Residential Utility Consumer Office ("RUCO"). I will be addressing four primary areas of concern:
 - SCTA's opposition to CAP water;
 - Assured water supply issues and the use of CAP water;
 - Support for groundwater savings project with golf courses; and
 - Link between water conservation and use of renewable water supplies.

I.

REBUTTAL TO MARY ELAINE CHARLESWORTH

SCTA Opposition to CAP Water

Q. What position did SCTA initially take regarding CAP water?

A. Before the public planning process, SCTA supported the reassignment of part of Sun City Water Company's CAP allocation to the Agua Fria Division.

In a letter of support to the Arizona Department of Water Resources, SCTA wrote:

As you are aware, Taxpayers was actively involved in Citizens' rate case before the Arizona Corporation Commission. In particular, Taxpayers was quite vocal on the issue of paying the holding costs for CAP water. During the proceedings, Taxpayers argued that the allocation for Sun City Water Company was onerous on the rate payers of Sun City. Taxpayers repeatedly asked Citizens to reevaluate the amount of CAP water that should be put to use in Sun City. We are pleased that Citizens has finally taken our advice.

We have reviewed the white paper prepared by Citizens and find the result acceptable. Taxpayers, contrary to public perception, is not anti-CAP water. Taxpayers simply desires that the rate payers only be required to pay for their fair share. The analysis prepared by Citizens is based on sound reasoning and Taxpayers is ready to support the amendment to Sun City's subcontract accordingly.

At the first and second meetings of the CAP Task Force, SCTA representatives demonstrated further support for the use of CAP water by agreeing to the following mission statement:

The underlying principle of this cooperative public planning process is that CAP water is needed to maintain the quality of life in Sun City, Sun City West and Youngtown. The mission of the Task Force is to develop consensus on the best plan for the use of CAP water that meets the Arizona Department of Water Resources guidelines to

achieve "safe yield", and that will be supported and paid for by the customers of Sun City Water Company and Sun City West Utilities Company.

3

4

5

Α.

Did SCTA change its support for CAP water?

6 7

8 9

10 11

12

13 14

> 15 16

17 18

19 20

21

22 23

24

25

26

27

28 29

- Q.
 - Yes. While SCTA initially supported keeping 4,189 acre-feet of CAP water for use in Sun City and then supported a mission statement to develop the best plan for use of CAP water, SCTA later changed its position and began lobbying for relinquishment of the CAP water. Representatives of SCTA lobbied other Task Force members and focused much of the Task Force's discussion on SCTA's preferred option—relinquishment. As a result of SCTA's lobbying, relinquishment of the CAP allocation was discussed as early as the third Task Force meeting. Ms. Charlesworth, who was not officially representing SCTA on the Task Force, began sitting at the table and interacting with the Task Force as a third representative of SCTA.

At the March 31, 1998, meeting, SCTA escalated its presence further by inviting Michael Curtis to attend the Task Force meeting. Mr. Curtis, introduced as legal counsel to SCTA, made an argument that the customers cannot afford CAP water, so any option that uses CAP water would be unfair. Task Force members were disturbed by the presence of a fourth SCTA representative sitting at the table, as evidenced by newspaper articles describing the meeting.

At this same meeting, one of the representatives of the SCTA (Preston Welch) engaged in an altercation with another Task Force member that resulted in Mr. Welch leaving the Task Force deliberations and submitting

his resignation. At the next Task Force meeting, Ms. Charlesworth replaced Mr. Welch as the official second SCTA representative.

At the April 7, 1998, meeting, SCTA escalated even further its position that relinquishment was the only acceptable option and invited Commissioner Jim Irvin to attend a Task Force meeting as SCTA's guest. Mr. Irvin attended the meeting, but made no statement supporting or opposing the use of CAP water.

At the April 21, 1998, meeting, Ms. Charlesworth implored the Task Force to continue deliberating relinquishment as an option. The Task Force agreed to include relinquishment as an option that would be evaluated against the same criteria as the use options. In addition, the Task Force agreed to hear presentations supporting SCTA's position by Bill Sullivan, SCTA's legal counsel, and Preston Welch, former CAP Task Force member representing SCTA.

- Q. What happened during the Task Force meeting where SCTA advocated its position on relinquishment?
- At the April 28, 1998, meeting, the Task Force devoted the entire meeting to discussing SCTA's position. No other option received this amount of attention from the Task Force. During the meeting, Mr. Welch was asked why SCTA supported a partial reassignment of Sun City's CAP allocation earlier in the year, if SCTA's position has been to relinquish the allocation. Mr. Welch responded that he did not think Citizens would consider a total reassignment. Mr. Welch was further questioned as to how much SCTA

would be willing to pay for CAP water. Upon further querying, Mr. Welch would not agree to support the use of CAP water even if Citizens paid all the costs.

4 5

6

7

8

9

10

11

Mr. Sullivan made a separate presentation and reasoned that all the harms explored by the Task Force were speculative, that to the extent these harms did occur surrounding communities would ameliorate those harms, and finally that with the exception of the groundwater savings project with the golf courses and water treatment plants, the CAP-use options being considered by the Task Force would not mitigate those harms to Sun City and Sun City West residents.

12

What happened next? Q.

14

Α.

13

where SCTA representatives and their attorneys advocated relinquishment

15 16

to people attending the open houses. Based on a survey conducted of

At the end of April, the Task Force hosted two community open houses,

17

attendees, SCTA's efforts were unproductive. There were 180 attendees at

18

the open houses. 103 attendees completed surveys. Of those, 94

19

attendees, or 91% of those surveyed, believed the CAP water should not be

20 21 relinguished under any circumstances.

process [the Task Force process] was offensive.

22 23 At the meeting on May 12, 1998, SCTA excused itself from the Task Force saying that the water use options should be voted upon and that the

24

25

26

27

28

After the Task Force finished its work, SCTA published large advertisements in the local newspapers aimed at persuading the community to support SCTA's position to relinquish the CAP allocation. In addition, SCTA held public meetings to address the issue of CAP water. SCTA representatives were repeatedly quoted in newspaper articles in opposition to the Task Force and its recommendation to use CAP water.

Q. Is Ms. Charlesworth being completely straight forward when she states that SCTA does not oppose importing CAP water?

A. No. Based on the actions and statements of SCTA during and since the CAP Task Force, no reasonable person could conclude that SCTA supports importing CAP water. Further, SCTA's filed testimony in this proceeding substantiates SCTA's opposition to CAP water. In her testimony, Ms. Charlesworth is asked if SCTA opposes the importation of CAP water. While she responds "Absolutely not", Ms. Charlesworth undermines her position later when she is asked if SCTA advocates any CAP water use options and fails to identify any acceptable option.

The financial viability of the CAP depends substantially on CAP subcontractors using and paying for their CAP allocations. It is inconsistent to support the importation of CAP water into central Arizona at the cost of over \$5 billion to taxpayers across the United States and then refuse to use the resource once it is brought to the door steps of Sun City because SCTA is "offended" by an evaluation process used by a community group to decide how to use a community resource—its CAP allocation.

- Q. Should SCTA's position be given much credence given the consensus decision made by the CAP Task Force?
- A. No. The decision to keep and use the CAP allocation was made through a consensus, decision-making process. The SCTA dropped out just before the final decision was made. SCTA's opinions were solicited by the facilitator during the development of the Task Force process. SCTA had between two and four representatives at the Task Force deliberations. SCTA's preferred alternative was given more time than all of the use options combined. Even so, the Task Force as a whole concluded that the CAP water should be kept and put to use. In its testimony, the CAP Task Force provides considerable discourse substantiating the widespread community support for keeping CAP water and for delivering CAP water to the groundwater savings project with the golf courses.

Furthermore, SCTA purports to represent the same people that were already represented on the Task Force by the Recreation Centers of Sun City and the Sun City Homeowners Association. These two organizations are better suited to represent the community on the CAP issue than SCTA is, because SCTA's mission and responsibilities are too narrowly focused to consider environmental threats to the community.

In short, despite vigorous past and ongoing efforts to garner support for its position, SCTA has been unable to persuade the Task Force members, the community, or the staffs of the ACC and RUCO, that Citizens' CAP water allocation should be relinquished.

- Q. Is relinquishment even an option to consider in this proceeding?
- A. No. The Commission already decided to retain the CAP allocation in Decision No. 60172. The Commission found that Citizens' decision to obtain a CAP allocation was a "prudent planning decision". SCTA's testimony is inconsistent with Decision No. 60172. The groundwater savings project described in this proceeding is consistent with Decision No. 60172. Mr. Ray Jones' rebuttal testimony discusses this issue further.

II. Assured Water Supply Determinations and the Use of CAP Water

- Q. What is a 100-year assured water supply?
- A. A 100-year assured water supply is a point-in-time determination defined legally by statute (A.R.S. § 45-576.I) as sufficient water of adequate quality that will be continuously available to meet the water needs of the proposed use for at least 100 years and will be consistent with state mandated conservation requirements and water management goals of the area (i.e. safe yield). In addition, whoever is constructing the facilities to bring this supply to the subdivision must be financially capable of constructing the necessary infrastructure to bring the supply to the customers.

Obtaining an assured water supply is a regulatory requirement imposed upon persons who propose to offer subdivided lands for sale or lease in active management areas (groundwater basins actively managed by ADWR). An assured water supply can be obtained in the form of a certificate of assured water supply or it can be achieved by obtaining service from a water provider designated as having an assured water supply.

The first generation of today's assured water supply program was implemented in 1973 and was limited to consumer protection concerns. While it addressed water supply in general, it did not prohibit the sale of subdivided homes for lack of an adequate water supply. Instead, the program simply required that if an adequate supply was not available, this information must be disclosed to the buyer and presented in all promotional materials. In 1980, the Arizona Groundwater Management Act (AGMA) included provisions that superceded the 1973 adequacy program. The new assured water supply program imposed additional requirements that extended beyond the consumer-protection provisions found in the 1973 adequacy program and introduced the concept of limiting groundwater withdrawals to safe yield levels.

Q. Was Del E. Webb Development Company required to obtain a certificate of assured water supply to develop Sun City?

A. No. Webb was not required to obtain a 100-year assured water supply in order to sell or lease subdivided homes in Sun City. When Citizens signed its development agreement with Webb in 1962, no assured water supply program existed, not even the limited requirements under the 1973 program. Sun City was subdivided and under active sales by 1973. By 1980, when the AGMA was enacted, Del Webb had constructed over 25,000 homes in Sun City.

Q. In its testimony, SCTA concludes that the Arizona Water Commission's 1974 finding of adequate water supply and the Commission's subsequent finding of assured water supply in 1980 mean that the groundwater supply

is adequate to meet the demands of Sun City indefinitely. Based on your understanding of these documents, do you agree with SCTA's conclusion? No. When the Arizona Water Commission issued its 1974 letter of adequacy, referred to by Ms. Charlesworth in her testimony, the Commission was making a point-in-time determination. In his letter, Wesley Steiner, Executive Director of the Commission, warns that, if information not known at that time the adequacy determination results in a finding of inadequacy, the Commission could revoke the designation granted in the letter.

In 1980, Mr. Steiner notified Sun City Water Company that its designated status under the adequacy program had been carried over into the new assured water supply program. Again, this was a point-in-time determination. In this letter, Mr. Steiner makes it clear that the newly enacted AGMA envisioned CAP as the primary source of water for demonstrating an assured water supply and that an unconditional offer to enter into a CAP subcontract created a "presumption of an assured water supply".

The law had clearly changed. While Mr. Steiner continued Sun City Water Company's designation based on the water supply studies conducted under the 1973 program, he clearly indicated that the designation would be revoked if future evaluations revealed that the water supply used as the basis for the designation was found to be inconsistent with the management plan and goals of the active management area. He further indicated that the designation would be revoked "unless the utility has

protected its designation by filing with the Director an unconditional offer to contract for CAP water and proceeds to enter into the contract when offered by the Secretary."

Q. Does the 1984 Water Resources Planning Study conducted by Citizens conclude, as also suggested by SCTA, that sufficient groundwater exists to meet Sun City's demands indefinitely?

A. No. In fact, the opposite is true. The 1984 study concluded that Citizens should not only pursue groundwater savings projects and direct recharge projects using CAP water, but the study also recommended that Citizens pursue recharging wastewater currently treated at the Tolleson Waste Water Treatment Plant. The study in no way concluded that Citizens should relinquish its CAP allocation.

In the study, two modeling scenarios were examined. The first study assumed demands would be met exclusively with groundwater. Under this scenario, severe groundwater overdraft and water-table declines were demonstrated. The second scenario also assumed that demands would be met exclusively with groundwater, but this scenario also assumed that two recharge projects would be constructed and operated. This scenario demonstrated that the recharge projects could stabilize or reverse water table declines in some areas.

Q. Is Sun City Water Company designated as having an assured water supply today?

-11 -

A. No. Since the inception of the AGMA, ADWR has promulgated rules to implement the statutory provisions related to assured water supply.

Specifically, the rules defined "consistency with the management goal," a concept referred to in the 1980 Steiner letter. In the 1980 letter, the standard for obtaining a designation was signing a CAP subcontract. In 1995, after the assured water supply rules were promulgated, the standard was raised. Just holding a CAP allocation was not sufficient. The supply had to be put to use.

On August 7, 1995, Citizens applied for designation of assured water supply for both Sun City Water Company and Sun City West Utilities Company. On September 22, 1995, ADWR issued a notice of incompletion for both utilities, citing among other items, that no information submitted clearly demonstrated that the water used would be consistent with the management goal as demonstrated through direct physical access to sufficient renewable water supplies. On December 6, 1995, because Citizens' applications for designation remained incomplete, ADWR revoked the point-in-time determinations made by the Arizona Water Commission in 1974 and 1980.

- Q. Why did Citizens not complete the applications and obtain the designations?
- A. Citizens could not demonstrate consistency with the management goal through direct physical access to sufficient renewable water supplies.
- Q. Did the determinations of an adequate water supply in 1974, and an assured water supply in 1980, mean that groundwater would be available to meet the demands of Sun City indefinitely?

Α.

No. These determinations simply meant -- when the determinations were made -- that hydrologists calculated that there was enough groundwater stored in the aquifer beneath Sun City to a depth of 1,200 feet and that the annual water level decline rate in the area was less than 10 feet per year.

In the CAP Task Force's Final Report and in its testimony, the members of the CAP Task Force identified the consequences of continued long-term groundwater declines. These consequences included a number of harms including land subsidence and earth fissuring. All of the consequences of groundwater declines identified by the CAP Task Force have been occurring in the proximity of Sun City. These harms are being realized long before the water table has reached a depth of 1,200 feet.

Moreover, groundwater demands placed on the aquifer today are significantly higher than in 1974. Numerous investigations have been conducted since 1974 and all of those studies have concluded that groundwater declines are significant.

Again, it is important to realize that an assured water supply certificate or designation is a point-in-time determination. What was known and understood today was not known and understood in 1974.

- Q. What will guarantee that the demands of Sun City will be met indefinitely?
- A. The best way to secure the most reliable supply of water to meet demands indefinitely is to develop a renewable water supply, like Sun City's CAP allocation, and use it to replace groundwater mining occurring in Sun City

today. The only way to prevent the consequences of groundwater declines is to stop pumping groundwater.

Q. Is Sun City's CAP entitlement significant enough to meet 100% of Sun City's demands?

 A. No. CAP water, like groundwater, is a limited supply. When CAP water was allocated to water utilities in Arizona, Citizens attempted to get enough to meet 100% of its demands. Competing demands in the Phoenix area limited CAP supplies for all parties. Citizens anticipates that additional CAP water or some other supply will be needed to offset the groundwater use not offset by Sun City Water Company's existing entitlement to CAP water.

Q. Is it significant or relevant that when Sun City was developed all water demands were supplied by groundwater and not CAP water?

Arizona Water Commission until 1974. Subcontracts for CAP water were not tendered for consideration until 1984. The only source available for

before 1973, Webb was not obligated to demonstrate any supply

Sun City was groundwater. Moreover, because Sun City was subdivided

No. Expressions of interest for CAP water were not even received by the

sufficiency, let alone disclose any deficiency had it been found. Nor was

Webb obligated to disclose that the community was dependent on mined

groundwater.

Q. Are past expectations of Sun City residents relevant to resolving today's groundwater declines?

 No. First, given normal residential turnover, it is very unlikely that many of the original Sun City residents from the early 1970s are still occupying homes there today. Second, regardless of any expectations, the inescapable fact remains that past and present Sun City residents bear some responsibility for the current ground water problems. The Task Force accepted this responsibility and offered a solution:

...the Task Force recognized the one essential and inescapable fact that the Retirement Communities (i.e. Sun City, Sun City West and Youngtown) themselves are currently pumping substantially more in acre-feet of water per year than natural recharge is replenishing. And that overdraft is their responsibility.

If the Retirement Communities are to escape the worst effects of their overdraft in groundwater pumping, then CAP water must be used in a manner which clearly and directly reduces the current amount of groundwater pumping.

Further, the Task Force recommended the groundwater savings project for the golf courses because it would provide a direct and immediate benefit to the potable wells in Sun City, Sun City West and Youngtown. The Task Force did not want the water stored at the groundwater savings facility to be pumped by users located closer to the location where the groundwater is saved, in the case of a groundwater savings project, or recharged, in the case of a direct recharge project.

REBUTTAL TO MARYLEE DIAZ CORTEZ

III. Support for Groundwater Savings Project with Golf Courses

4

1

2

3

- 5
- 6
- 7 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22 23
- 24
- 25
- 26
- 27

28

- Please summarize RUCO's position regarding acceptance of the Q. groundwater savings project for the golf courses as the permanent solution to using CAP water in Sun City and Sun City West.
- Α. RUCO's position is that, while the higher cost of CAP water versus groundwater is outweighed by the furtherance of state water policies and goals, CAP water at any cost is not necessarily required, justified or prudent. RUCO finds Citizens has three water use options that meet state water policy goals and sees no need to select the most expensive of the three options. Finally, RUCO argues that it is premature to commit to the construction of the groundwater savings project with the golf courses before trying the groundwater savings project with MWD or the Agua Fria Recharge Project to see if these projects will work to meet similar objectives.
- Q. Is RUCO correct in its statement that all three water-use options meet state water policy goals?
- Yes. To varying degrees, all of the options considered by the Task Force, Α. including the three discussed in this proceeding, meet state water policy goals. For that matter, even relinquishment would further water policy goals since the allocation could be transferred to another user in the Active Management Area who could replace existing groundwater demands with CAP water. Obviously, while relinquishment would further state water management goals in another location, relinquishment would not provide any benefit to Sun City, Sun City West or Youngtown. The issue is not

whether these projects or any of the projects considered by the Task Force meet state water policy—all of them do. The issue is which projects provide the most direct and immediate benefit to Sun City, Sun City West and Youngtown.

Q. Which options provide the most direct benefit?

A. In its deliberations, the Task Force evaluated each project against several criteria including direct benefit. The groundwater savings project with the golf courses scored highest, followed closely by the water treatment plant options. Citizens' local area recharge project scored considerably lower than the treatment plant options, followed closely by the Agua Fria Recharge Project. The MWD project followed considerably behind the Agua Fria Recharge Project and relinquishment performed poorly on this criterion.

Q. Is direct benefit important to Citizens?

Yes. Citizens' water service areas are located in an area that boasts some of the highest groundwater decline rates and subsidence rates, not only in the Phoenix Active Management Area, but in the State of Arizona. ADWR has identified the northwest valley as a "critical decline area" and is focusing its regulatory resources on resolving the continued groundwater declines in the area. While Citizens agrees that the three projects discussed in this proceeding all meet state water policy goals, Citizens believes that meeting the lowest common denominator is not sufficient to mitigate the harms of long-term declines in our area. More aggressive

action must be taken to address the concerns raised in the Task Force report and in other studies documenting land subsidence, earth fissuring and other harms associated with groundwater declines.

Q. Is direct benefit important to Citizens' customers?

A. Yes. When establishing the relative importance of the numerous criteria considered by the Task Force, "direct benefits" was the most important criterion. "Cost" ranked second and "public acceptability" ranked third. During the community open houses conducted by the Task Force, members of the public were surveyed. Of those surveyed, the most important criteria were "direct benefits" and "water quality". Both of these criteria were equally important to those surveyed. While the Task Force ranked "cost" as being the second most important criterion, the public viewed "cost" as the fourth most important criterion.

Those surveyed at the open houses also favored the golf course option over the other options. Finally, the CAP Task Force in its testimony makes compelling arguments for why recharge of CAP water at a remote site is not

acceptable:

The Task Force concluded that there is really only one effective way to make use of CAP water in a manner that will directly benefit the Retirement Communities and that is to turn off the current pumping of groundwater to the maximum extent possible, and replace that pumping with CAP water delivered to the golf courses currently doing the pumping. Any other approaches which have been considered simply do not allow the Retirement Communities to deal with the triple problems of subsidence, falling groundwater tables and regulatory demands to achieve safe yield.

Is "direct benefit" important to any others who intervened in this Q. proceeding?

- Yes. The Staff's testimony clearly indicates that they understand the Α. importance of "direct benefit" to the customers. Staff recommends remote recharge of CAP water at the MWD recharge project until the Aqua Fria Recharge Project is in place. But Staff viewed remote recharge at either location only as an interim solution, until the groundwater savings project with the golf courses is completed.
- Is the groundwater savings project with the golf courses consistent with the Q. regulatory principle of least-cost alternative?
- Yes. Of the three options that performed highest on the direct benefit Α. criterion used to evaluate all the water use options, the groundwater savings project with the golf courses is the least-cost alternative.

Should the Commission approve the groundwater savings project with the 16 Q. golf courses irrespective of the least-cost alternative principle?

Yes. Just as the decision to allocate the costs across the community is best A. left with the community, as I will discuss below, so should be the decision to store CAP water at a groundwater savings project with local golf courses instead of storing CAP water at the MWD groundwater savings project.

22

17

18

19

20

21

23

24

25

26 27

28

IV. Link Between Water Conservation and Use of Renewable Water **Supplies**

3

4

5

Q. What is the Total Gallons per Capita Per Day (GPCD) Program?

6 7

8 9

10

11

12

13 14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

- Α. The Total GPCD Program is one of three conservation program offered to large municipal water providers regulated under the State's Municipal Conservation Program. The purpose of the Total GPCD program is to reduce the consumption of groundwater, not CAP water. The use of CAP water, or some other renewable water supply, like the conservation program, is another tool water managers can use to reduce groundwater pumping.
- When ADWR determines compliance with GPCD requirements, are Q. groundwater and surface water sources treated differently?
- Yes. When calculating compliance with the Total GPCD requirement, ADWR Α. assumes that groundwater is the last source of supply used. Surface water sources like CAP water and SRP water are counted first. If a water provider exceeds its GPCD requirement and the overage is less than the total amount of groundwater used, then ADWR takes enforcement action against the total overage. If the overage exceeds the total amount of groundwater used, then ADWR only takes enforcement action against the groundwater portion of the overage. The following examples illustrate ADWR's enforcement policy:

EXAMPLE 1: In 1998, ABC Water Company was entitled to use 10,000 acre-feet of water according to its GPCD requirement. In 1998, ABC Water Company actually used 15,000 acre-feet. The overage is 5,000 acre-feet.

Since ABC Water Company is 100% dependent on groundwater, ADWR will take enforcement action against the entire 5,000 acre-feet.

EXAMPLE 2: In 1998, 123 Water Company was also entitled to 10,000 acre-feet of water according to its GPCD requirement. In 1998, 123 Water Company actually used 15,000 acre-feet. The overage is again 5,000 acre-feet. Fortunately, 123 Water Company has a CAP allocation of 14,000 acre-feet that it stored at the MWD groundwater savings facility and recovered as CAP water through groundwater wells in 1998. The groundwater portion of the overage is only 1,000 acre-feet. Hence, ADWR will only take enforcement action against 1,000 acre-feet.

Just as groundwater use is the "cost causer" in a GPCD enforcement action, groundwater use is the cost causer forcing the shift to CAP water.

Q. What causes a water provider to exceed its Total GPCD requirement?
A. In her testimony, Ms. Diaz Cortez concludes that because commercial customers are not included in the equation to calculate compliance with GPCD requirements, they are in large part the reason for exceeding the GPCD limits. This is not true. There are many reasons why a water provider might exceed its conservation requirement including weather fluctuations, poorly set conservation requirements, changes in occupancy and person-per-household rates, and changes in ratios of seasonal to non-seasonal population to list a few. But since Ms. Diaz Cortez specifically points out commercial users and later in her testimony recommends placing the cost of CAP primarily onto commercial users, I will address in detail that component of the GPCD requirement applicable to commercial customers.

 The GPCD requirements established by ADWR include a component for commercial usage. At the time the requirements were established for Sun City and Sun City West, the percentage of commercial water usage was 15% of customer deliveries in Sun City and 14% in Sun City West. In 1998, the percentage of commercial water usage was 20% in Sun City and 15% in Sun City West.

As an example, assume the residential usage in ABC Water Company is 85 GPCP. The GPCD requirement established by ADWR assumes, for example, that commercial water use is 15% of total deliveries. The GPCD requirement will then be adjusted to include an additional 15 GPCD for commercial, raising the requirement to 100 GPCD. So each residential GPCD gets 15 additional GPCD to account for commercial demand in the service area. The logic behind this assumption is that the people who live in the service area cause the use of the water by commercial establishments in their service area.

ADWR's assumptions break down when the proportion of residential-to-commercial deliveries changes causing a larger portion of the deliveries to be made to commercial users. Only under this condition do commercial customers cause an increase in the GPCD not anticipated by the requirement. To a limited extent, this is occurring in Sun City with a slight increase in commercial use from 15% to 20%. In Sun City West, the percentage of commercial usage appears to be stable.

Moreover, increases in GPCD usage caused by disproportionate increases in commercial water usage are not typically caused by excessive usage on the part of the commercial user. A commercial user can be extremely water efficient, but because of the magnitude of the use in relationship to total customer deliveries, still cause the GPCD to increase above anticipated levels. This is particularly true of system with a small water use based.

For example, assume 123 Water Company delivers 1000 acre-feet to a community of 2000 people in 1998. 250 acre-feet of the 1000 acre-feet is delivered to commercial customers. 123 Water Company uses no more or less water than its GPCD requirement allows (good conservation program) giving 123 Water Company a GPCD requirement of 446. The residential portion of the requirement is 334 GPCD. The commercial portion is 112 GPCD.

In 1999, a new golf course comes on line in the service area that meets ADWR's industrial-conservation-program turf allotment. The turf allotment for the course is 500 acre-feet. In the same year, 100 additional people move into 123 Water Company's service area. The conservation requirement now allows 1,049 acre-feet of demand, but 123 Water Company's demand is 1,549 acre-feet. While 123 Water Company has exceeded its conservation requirement, the overage is not caused by wasteful water use. In fact, the golf course is in compliance with the industrial conservation requirement established by ADWR. It is caused by a disproportionate increase in commercial water use in 123 Water Company.

- 1 2
- 3
- 4 5
- 6
- 7
- 8
- 9 10
- 11
- 12
- 13
- 14
- 15
- 1617
- 18
- 19
- 20
- 2122
- 23
- 24
- 25
- 26
- 27
- 2829

- Q. Should the costs of using CAP water be imposed on the higher water using accounts as recommended by RUCO?
- whether a customer uses one gallon of groundwater or 500,000 gallons. RUCO's recommended rate design essentially places the entire burden of paying for the costs of CAP on the commercial customers. In 1998, the combined commercial demand in Sun City and Sun City West was approximately 3,600 acre-feet. To label the commercial users as the "cost causers" and burden those users with paying for costs associated with 6,561 acre-feet of CAP water is grossly unfair.

In her testimony, Ms. Diaz Cortez establishes allowable monthly usage levels, based on the Total GPCD requirements for Sun City Water Company and Sun Cities West Utilities Company, and proposes that the surcharge be applied to consumption exceeding these allowable levels. Ms. Diaz Cortez' analysis fails to consider the complexity of the Total GPCD requirement, a requirement that is actually made up of several smaller components with unique conservation requirements for each component. For example, the Total GPCD requirement includes a GPCD component for lost-andunaccounted-for water. As another example, the Total GPCD requirement includes a GPCD component for households constructed before 1990 and for households constructed between 1990 and 1995 and then again for households constructed after 1995. To meet the Total GPCD requirement, households constructed after 1990 are expected to be considerably more water efficient than those constructed before 1990. Households constructed after 1995 are expected to be even more efficient than the households that came on line between 1990 and 1995.

8

9

10 11 12

14 15

13

16 17 18

20

21

22

19

23

24

25 26

27

28

29

It is not consistent with the Total GPCD requirements to set an allowable monthly usage of 15,000 gallons or 11,000 gallons and assume that water use below these levels is deemed efficient. Moreover, this approach is not consistent with a water-conservation-oriented rate structure that sends proper pricing signals and protects life line uses.

In essence, Ms. Diaz Cortez is recommending that the existing conservation-oriented rate structure be adjusted to have a more aggressive pricing signal at water use levels above the allowable limits defined by RUCO. While the existing conservation-oriented rate may or may not be sending proper pricing signals, this proceeding is not the proper forum to debate this issue. Determining an effective and fair conservation-oriented rate structure would require a separate study and a separate proceeding.

In the final analysis, there is not enough CAP water available to meet even the lifeline needs of customers let alone luxury needs. The Task Force estimated that each household would receive roughly 3,500 gallons of CAP water if shared equally throughout the service area. The rate design proposed by the Task Force is the best rate design to recovery the costs associated with CAP water.

- Q. How does water conservation and use of CAP water relate to the achievement of safe yield consistent with the Groundwater Management Act of 1980?
- The water management goal for the Phoenix Active Management Area, the groundwater basin where Sun City Water Company and Sun City West Utilities Company are located, is safe yield. Safe yield is defined as a long-

term balance between the amount of groundwater pumped from underground aquifers and the amount of water that is naturally and artificially recharged back into that same aquifer. Water conservation and shifting to a renewable water supply like CAP water are two different tools used by water managers to attain safe yield conditions.

о

Typically, water managers establish water budgets that allow a comparison between the demands of a water service area and the supplies available for use. Demand exceeding the amount of renewable supplies available is met with mined groundwater. It is this supply deficit that requires water managers to either seek an additional renewable supply of water or reduce water demand in order to reach a balance between total demand and total renewable water supply. In some respects, water conservation can be likened to a renewable water supply.

- Q. Can water conservation alone be used to reach safe yield?
- A. No. A water provider totally dependent on groundwater would have to reduce demand by 100% in order to eliminate the groundwater overdraft.

- Q. Can use of renewable supplies alone be used to reach safe yield?
- A. Yes, but such a unilateral approach is not consistent with sound water management principles that prescribe to the concept of using water wisely for a beneficial use. Moreover, water conservation is mandated by State law as discussed above and is required under the terms of Citizens' subcontracts for CAP water.

- 1 2
- 3
- 5

- 6 7
- 8
- 9

10

- 11 12
- 13
- 14

15

16

- 17
- 18
- 19
- 20
- 21 22
- 23

- 24
- 25
- 26

27

- 28
- 29

- Q. Is it appropriate to link the costs of using CAP with a conservation-oriented rate structure?
- No. In this case, RUCO should view water conservation as an additional renewable water supply, another tool water managers at Citizens can use to attain safe yield in its service areas. The combination of using renewable water supplies like CAP water, coupled with demand management strategies like a conservation oriented rate structure, will ultimately allow Citizens to be successful in mitigating historic groundwater declines in Sun City and Sun City West.

Moreover, the use of CAP water should be rewarded not punished. Just as the federal and state governments have heavily subsidized the cost of CAP water to encourage the use of this supply, the Commission should likewise encourage the use of CAP water. Encouragement can be in the form of a carrot or a stick. Citizens recommends the carrot.

Finally, as indicated in Mr. Dabelstein's testimony, the CAP Task Force specifically recommended the rate design proposed in this filing. While RUCO's analysis of the allocation of these costs is thoughtful, the community is really best suited to determine how to fairly allocate costs. Citizens supports the Task Force's proposed cost allocation for the reasons listed above, but primarily because the rate design reflects the wishes of the community.

- Does this conclude your testimony? Q.
- Α. Yes.

INTRODUCTION

1

2

3

4

5

6

7

8

9

10

11

12

13

15

16

17

18

19

20

21

22

23

24

25

26

27

- Q. Please state your name and business address.
- A. My name is Blaine H. Akine. My business address is 12425 W. Bell Road, Suite C306, Surprise, Arizona 85374.
- Q. By whom are you employed and in what capacity?
- A. I am employed by Citizens Utilities Company ("Citizens") and serve as the Engineering and Development Services Manager for Citizens' Water and Wastewater operations in Maricopa and Santa Cruz Counties.
- Q. How long have you been employed by Citizens?
- A. I have been employed by the Citizens for almost four years.
- 14 | Q. What are your duties and responsibilities?
 - A. My duties and responsibilities include:
 - managing engineering of plant improvements and replacements, including pipelines, wells, pumping and storage facilities.
 - managing all development activities, including line extension agreement negotiations, related regulatory activity and filings, and tracking and accounting for agreement activity.
 - Q. What is your relevant education, training and experience?
 - A. I attended and graduated from the University of Hawaii with a Bachelor of Science degree in Civil Engineering. I also attended and graduated from Arizona State University with a Master of Business Administration degree. I am a member of several professional associations, including the American

Water Works Association, Water Environment Federation, American Society of Civil Engineers, Arizona Water Pollution Control Association, American Management Association and others.

4

5

6

- Q. Do you hold any professional licenses?
- A. Yes, I am a registered Professional Engineer in the State of Arizona.

7

8

9

- Q. Have you presented testimony before any regulatory commissions?
- A. Yes. I testified in a Certificate of Convenience and Necessity proceeding before the Arizona Corporation Commission.

11

12

13

10

- Q. What is the purpose of your testimony in this proceeding?
- A. I am providing rebuttal testimony to the direct testimony of Mr. Dennis
 Hustead for the Sun City Taxpayers Association.

15

16

17

18

14

Q. Do you agree with Mr. Hustead's opinion that it is not prudent to approve the CAP Task Force's recommended plan before entering into enforceable contracts with the golf courses?

19 20

21

for using CAP Water on golf courses is a valid plan. Reviewing available options and formulating a plan is the first step in any complex process. The next step is obtaining any necessary regulatory approval of the plan. Once

23

22

the plan is approved the work focus will then be directed toward finalizing

one of the details will be to obtain all required agreements and contracts

No, I don't agree. I believe that the CAP Task Force's recommended plan

2425

and obtaining the numerous details to make the plan a reality. In this case,

26

with golf courses.

27

28

- Q. Is there anything unique about this situation which supports your position?

 A. Yes. The golf courses are owned and operated by the Recreation Centers
- of Sun City and Sun City West. Each of these organizations was represented on the CAP Task Force. Each Recreation Center participated in the planning process and the ultimate decision to construct the
 - groundwater savings project. Members of the Recreation Centers then debated and signed resolutions indicating their desire to enter into such
- Q. Do you agree with Mr. Hustead's review of the CAP Task Force's proposed Option 4.

contracts and to participate in the groundwater savings project.

- A. No, I don't agree. Although Mr. Hustead's ideas on eliminating the storage and pumping stations proposed within Option 4 may have merit, it is premature to conclude that they are not needed. Assuming that Mr. Hustead's statement regarding the original golf course storage design concepts are true, it would be irresponsible to rely solely on those concepts to modify operation of a facility with certain components that are nearly 30 years old. Clearly, additional review is warranted. The plan and cost estimates prepared by Brown and Caldwell were purposely based on conservative assumptions to compensate for the numerous unknowns that could not be fully analyzed during the CAP Task Force process. This insured that the CAP Task Force was given a valid option to consider rather than an option which could prove to be invalid upon detailed engineering analysis
- Q. How should Citizens properly address Mr. Hustead's pump station concerns proposed within his Option 4 Modified?
- A. Once the Task Force's plan is approved, surveys are completed and final design flow rates are established, a detailed engineering hydraulic analysis

of the proposed system will need to be completed during the project's preliminary design phase. This study will optimize the design and, if warranted, required booster pumping and piping will be reduced or eliminated.

Q. How should Citizens properly address Mr. Hustead's storage concerns proposed within his Option 4 Modified?

A. Once the Task Force's plan is approved, a detailed engineering analysis of the golf course reservoirs will need to be completed during the project's preliminary design phase to verify the actual storage available and required for each golf course. Only after the completion of this engineering analysis can a final decision be reached on the adequacy of the existing storage system. As mentioned by Mr. Hustead, the reservoir system will need to be properly designed to handle seasonal peak demands and also accommodate different inflow and outflow conditions.

Q. Do you agree with Mr. Hustead's idea in his Option #4 Modified that the most cost effective way to maximize CAP water deliveries is to maximize the use of the existing Sun City West golf course distribution system and thereby minimize the installation of new distribution systems within Sun City?

A. No, I don't agree. Mr. Hustead improperly stated that 5161 AF/Yr of CAP water could be delivered to Sun City West through the existing pipeline distribution system. In reality, only 2,985 AF/Yr of CAP water can be delivered to the Sun City West system. Although the irrigation demand for all the golf courses in Sun City West is 5451 AF/Yr, CAP water cannot be used on the two expansion area golf courses and the two private golf courses.

- Q. Why can't CAP water be used for the expansion area golf courses and the private courses?
- A. Regulatory constraints prohibit the use of CAP water on the expansion golf courses. Per Maricopa County requirements, the expansion golf courses are required to irrigate using 100% effluent water. Further, the only golf courses in Sun City West that should benefit from participation in the groundwater savings project are the public courses because the water demand of the public courses (2985 AF/Yr) exceeds the total Sun City West CAP allocation. Finally, the private courses did not participate in the CAP Task Force process. According to the Sun City Homeowners Association, they have not expressed any interest in participating in the groundwater savings project and prefer to continue to rely on mining groundwater.
- Q. What does this leave for delivery to the Sun City West golf courses?
- A. The demands for the expansion golf courses and the private golf course are 970 AF/Yr and 1496 AF/Yr, respectively. Subtracting these demands from the Sun City West total golf course demand of 5451 AF/Yr leaves 2,985 AF/Yr of CAP water that can be delivered to and used by the Sun City West golf courses. This CAP demand for Sun City West is only 613 AF/Yr more than the 2372 AF/Yr already allocated to Sun City West. A summary table is provided as Attachment BA –1.
- Q. Would the Sun City West pipeline distribution system even be able to operate the way Mr. Hustead suggests?
- A. I don't know. The existing Sun City West pipeline distribution system was constructed over 20 years ago with different design conditions. Whether it would be able to operate as Mr. Hustead suggests is unknown.

- Q. Do you agree with Mr. Hustead's idea that there could be a valid alternative plan to build a joint CAP transmission pipeline with the Agua Fria Division and thereby reducing the costs to Sun City/Sun City West?
- A. No, I don't agree. The plan and the timing for required physical delivery of CAP water into the Agua Fria Division differs from the proposed CAP Task Force Plan and thereby eliminates all opportunities to build a joint transmission pipeline system.

Q. Does Citizens have a current plan to use its allocated CAP water within it's Agua Fria Division?

A. Yes, Citizens' plan is to use the Maricopa Water District (MWD) groundwater savings project until a permanent project is developed. Citizens has also retained the consulting services of Brown and Caldwell to complete a Central Agua Fria Master Plan. This water master plan will address the timing and best ultimate use of CAP water within the Agua Fria Division.

Q. When will the Central Agua Fria Master Plan be completed?

 A. Brown and Caldwell are under contract with Citizens to complete this master plan by the end of year.

Q. What will likely be the ultimate CAP plan proposed within the Central Agua Fria Master Plan?

A. The ultimate plan will likely propose that an Agua Fria Division CAP treatment plant be built and operational not earlier than year 2005. The timing of construction of the plant will coincide with the anticipated customer growth within the Division. The Agua Fria Division CAP treatment plant will likely be constructed somewhere near Greenway Road along the Agua Fria Division's west CC&N boundary. Although one possible plan for

REBUTTAL TESTIMONY OF BLAINE H. AKINE CITIZENS UTILITIES COMPANY W-01656A-98-0577 SW-02334A-98-0577

delivery of water from the CAP Canal to the treatment plant will be via a pipeline, the actual need and/or size of pipeline can only be finalized after fully analyzing the MWD Beardsley Canal. This analysis will be completed as part of the master planning process. Due to its physical alignment along the Agua Fria Division's north boundary and the fact that the Agua Fria Division customers are also MWD shareholders, the Beardsley Canal presents a major opportunity for transportation of CAP water within the Agua Fria Division.

Q. Given that the Agua Fria Division's CAP treatment plant is not required at least until year 2005 and the uncertainty of a needed pipeline, do you think that the Agua Fria Division should participate at this time with the Sun City/Sun City West project?

A. No, I don't. As explained earlier, the required construction timing of the Agua Fria Division's CAP pipeline and treatment plant is under a much longer timeframe than the Sun City/Sun City West CAP project. The Agua Fria Division also has the immediately available alternative of using the MWD Beardsley canal to convey CAP water. There is a good possibility that a CAP transmission pipeline may never be required for the Agua Fria Division.

Q. Does this conclude your testimony?

23 |

Α.

Yes.

SUMMARY OF CAP WATER DELIVERIES TO SUN CITY WEST GOLF COURSES

Total Sun City West Golf Course Irrigation Demand: Less: Demand to Two Expansion Golf Courses: Less: Demand to Two Private Golf Courses: Total Available Demand to Offset with CAP Water:	5451 AF/Yr 970 AF/Yr 1496 <u>AF/Yr</u> 2985 AF/Yr		
		Less: CAP Water Allocated to Sun City West:	2372 AF/Yr
		Total Available Additional Domand to Offices with CAR Western	C40 A E \(\sigma_{\circ} \)